

LOCAL GOVERNMENT ADMINISTRATION OF TARUT ISLAND:

A STUDY OF A GEOGRAPHIC REGION

IN EASTERN SAUDI ARABIA

by

Reda Ahmed Nazer

**A Thesis Presented to the
FACULTY OF THE SCHOOL OF PUBLIC ADMINISTRATION
UNIVERSITY OF SOUTHERN CALIFORNIA**

**In Partial Fulfillment of the
Requirements for the Degree**

MASTER OF SCIENCE

June 1964

UMI Number: EP64737

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP64737

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

P. '64 N 335

This thesis, written by

Reda Ahmad Nazer

*under the direction of the undersigned Guidance
Committee, and approved by all its members, has
been presented to and accepted by the Faculty of
the School of Public Administration in partial ful-
fillment of the requirements for the degree of*

MASTER OF SCIENCE IN
PUBLIC ADMINISTRATION

Date January 1964

Guidance Committee:

Earl H. Jones
Chairman
Dr. E. S. Smith

ACKNOWLEDGMENTS

The writer would like to acknowledge his indebtedness to the Saudi Arabian Government for its generous financial assistance in making possible the scholarship under which the writer was enabled to obtain his degree. Grateful acknowledgment is also given to Messrs. Frank Patterson, Head of the Home Improvement Program, in Dhahran, R. H. Howard, Head of the Home Improvement Program, in Ras Tanura; D. Stauffer, Head of the Arab Development Department in Dhahran; Maurice Kelley, Head of the Geology Department; George Maranjian, of the Personnel Division of the G. O. Industrial Relations Department; Malcolm Quint, Head of the Arab Relations Department; and Grover Brown, Head of the Agricultural Department, all of the Arabian American Oil Company (ARAMCO) for their valuable assistance in making this thesis possible. Due to the lack of reference sources on Tarut Island, ARAMCO permitted the writer complete access to their files in order to obtain all the

information available on Tarut Island. In particular, appreciation is extended to the ARAMCO employees who have spent much time with the writer in arranging interviews with the citizens of Tarut and in the compilation of information from the contiguous communities of Tarut Island.

The writer is further indebted to Dr. Garth N. Jones and to Dr. David E. Shirley, both of the School of Public Administration, for their constructive criticism in the preparation and writing of this thesis, as a result of which many interpretive pitfalls have been avoided; also to Prof. Gordon Whitnall, of the School of Public Administration, for his inestimable assistance in the section on planning.

To all of them and to the numerous other contributors whose knowledge and personal observations of Tarut Island have been acknowledged in this thesis, the writer extends his deepest thanks.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of the Problem	1
Importance of the Study	4
Definitions of Arabic Terms Used	5
Method of Research and Scope of This Study .	9
II. GEOGRAPHICAL SETTING	12
Geographic Location	12
Topography and Climate	15
Resources	18
Pearl Diving	18
Fishing	20
Agriculture	22
Summary	30
III. CULTURAL AND SOCIAL ORGANIZATION	32
Historical Background of Eastern Region of Saudi Arabia	34

Chapter	Page
Religious Sects of Islam	41
Population	46
Classification of Population	49
The Peasants	50
The Progressivists	53
The Traditionalists	55
Family Institutions Characterized	56
Social Immobility	58
Education and Literacy	59
Land Ownership	66
Summary	70
IV. ADMINISTRATIVE AND TRADITIONAL FRAMEWORK OF	
LOCAL GOVERNMENT IN SAUDI ARABIA	72
Background	72
Municipal Organization and Function	77
Municipal Authority and Responsibility	81
Councils of Elders of Tarut Island	83
Functions	84
Authority and Responsibility	85
Relationship to the Governmental Adminis-	
tration of Tarut	86

Chapter	Page
Summary: Integration of Governmental Administration and Traditional Authority	89
✓ V. SOCIAL AND ECONOMIC GOALS	91
Regional Goals	91
Physiographic Goals	92
Economic Goals	93
Agriculture	94
Fishing	99
Pearl diving	100
Social Goals	101
The Administrative Goals	103
VI. LAND USE: A CASE PROBLEM	109
Present Concept of Planning in the Eastern	
✓ Region of Saudi Arabia	109
Existing Land Use on Tarut Island	112
Residential Land-use Pattern	112
Commercial Land-use	113
Agricultural Land-use	119
Other Land Use Elements	120
Thoroughfares	120
Utilities	122
Drainage	122

Chapter	Page
Sewers	123
Water	123
Electricity	129
Transportation	130
Communication	132
Public Facilities	132
Fire stations	132
Schools	133
Hospital	134
Playgrounds	134
Civic center	136
Customs Department and Coast Guard posts	137
Cemeteries and mosques	137
Summary	137
VII. FINDINGS AND CONCLUSIONS	140
/ BIBLIOGRAPHY	147
APPENDIX	156

LIST OF FIGURES

Figure	Page
1. Map of Tarut Bay Region in the Eastern Province of Saudi Arabia	13
2. Map of Qatif Oasis Draining System	26
3. Chart showing the availability of vegetables in Qatif and Hofuf areas	95
4. Chart of Existing Provincial Government in Eastern Province	157
5. Chart of Proposed Regional Government in Eastern Province	158

LIST OF TABLES

Table		Page
I.	Religious Affiliations of Tarut Island	42
II.	Religion of Employees from Qatif Oasis and Tarut Island	43
III.	Saudi Arab Employees Presently Living on Tarut Island	45
IV.	Saudi Arab Employees' District of Employment-- Tarut Island	47
V.	Years of Schooling (Pre-employment) of Employ- ees from Qatif Oasis and Tarut Island . . .	61
VI.	Arabic Literacy of Employees from Qatif Oasis and Tarut Island	62
VII.	English Literacy of Employees from Qatif Oasis and Tarut Island	63
VIII.	Father's Occupation of Employees from Qatif Oasis and Tarut Island	65

LIST OF ILLUSTRATIONS

Illustration	Page
1. Causeway built in 1962 which links Qatif and Tarut Island	16
2. Ruins of an historical palace built by the Portuguese	38
3. Ruins of an old Portuguese fort	39
4. Taruti peasants in the shopping center of Tarut waiting for jobs	51
5. Building a house in Tarut	52
6. An ARAMCO employee who is an example of a Progressivist	54
7. Comparison between peasant homes	68
8. Privately owned modern ice-making plant in Tarut Town	71
9. Two traditionalist land owners and an ARAMCO agricultural specialist with part of a crop of hybrid onions	97

Illustration	Page
10. A cantaloupe grown as part of the Agricultural Development Project	98
11. New housing for ARAMCO employees	114
12. The ultramodern home of a progressivist in Tarut Town	115
13. The Khamis market in Qatif	117
14. The market place in Qatif	118
15. A major Tarut Island road through a mixed residential-commercial district	121
16. Artesian well furnishes water for this small reservoir which is then released through drainage ditches to farm lands	124
17. Water from 'ain flows through drainage ditches to irrigate the date palms	126
18. Taruti woman washes pan in drainage ditch carrying spring water	127
19. Modern hospital building in Tarut	135
20. Cemetery for Shi'ites outside Tarut Town . . .	138

CHAPTER I

INTRODUCTION

I. STATEMENT OF THE PROBLEM

The purpose of this thesis is to explore the possibilities of developing an effective governmental administration, including comprehensive planning programs, for the emerging society that constitutes Tarut Island, located in the Persian Gulf in eastern Saudi Arabia.

The problems encountered in attempting to bring about major changes in this emerging rural community are typical of a developing society. Several principal areas of difficulty in this metamorphosis have been identified.

The first problem is that the jurisdiction of Tarut Island is under the Qatif Municipality, which has no well-defined administrative authority nor responsibility.

Secondly, Tarut Island's governmental administration is embodied in custom and tradition, apathy and iner-

tia, and lack of qualified knowledge of public administration.

A third problem is the fact that Tarut Island has been physically and socially isolated from the rest of Saudi Arabia's mainland for centuries. During this period of time, Tarut has developed its own ecological and administrative patterns, indifferent to those of surrounding communities. These environmental conditions have encouraged some Tarutis to monopolize the major resources of the Island--food and agricultural land. Today the rich land owners of Tarut Island ironically are not the citizens of Tarut but outsiders, who presently operate in the form of pressure groups in order to protect their material interests on the Island. For instance, during the last two years, the Arabian American Oil Company has endeavored with very little success to offer technical assistance to any private company for the purpose of extending electricity to the Island. This, however, was not possible in view of the fact that the various factions in Tarut were unable to resolve their differences and to agree on one satisfactory corporate company.

A fourth major problem encountered in attempting to implement major improvement programs in Tarut is the strong

position of the Council of Elders. This influential body is composed of elderly citizens and rich land owners whose function is to formulate and execute policies and to settle civic issues. There are five Councils of Elders on Tarut Island representing the numerous villages of the Island. Each of these Councils must approve all major improvement projects pertaining to the Island's village or villages which they represent. This is illustrated by the electricity issue which was mentioned above. The municipality, which is the arm and voice of the central government, lacks the delegated power and authority to bring about major changes on the Island without the prior consent of the Councils of Elders. Suffice it to say for the present, this deficiency is substantiated by the long period of isolation of Tarut and by the development of independent bodies of government representing each territorial jurisdiction on the Island.

These are some of the major problems that make this study unique. The writer of this thesis will attempt to identify and analyze these and other pertinent problems of administration, as well as those of the social organizational set up which took centuries to evolve. Furthermore, a closer examination of the Taruti will be presented

because he has for centuries been the victim of these unfortunate circumstances and inevitably has adapted himself to this cruel environment. Life for him has become a necessity; for today he holds the philosophy that in life there is existence, and in existence there is hope, and his principal hope in life is simply to live daily.

The purpose of this thesis is not to solve the problems of Tarut Island, but rather to develop the means of accomplishing the Island's objectives through effective governmental administration. It is only after this administrative problem has been identified and resolved that a long-range plan can be drawn in order to consider the individual specific needs of the Island.

II. IMPORTANCE OF THE STUDY

The governmental administration of Tarut Island, as well as that of the entire Eastern Province, is in need of radical reforms. The administrative responsibilities of the governmental bodies, for instance, are placed in the hands of municipalities (Baladiyah), whose functions are limited to street cleaning, general public construction works, enlargement of streets, and street sprinkling. This writer will attempt further analysis of this as well as

other aspects of the municipalities later in this study. However, for the present it is sufficient to state that these functions must be analyzed and evaluated in light of the region's economic, ecological, and administrative requirements.

It is the analysis of the need for reform that makes this study important, not only for Tarut Island but also for the Eastern Province. Because of the central government's deficiency in defining the authority and organizing the form of these administrative units, Tarut Island was chosen as the topic of this thesis, inasmuch as Tarut represents, in the form of a microscopic view, the problems of many of these areas.

Another aspect of the importance of this study is the fact that it will be the first of its type and magnitude in the entire country and will, therefore, establish a pattern for closer examination of major governmental administrative problems. It is through such scrutiny and evaluation that these problems may be solved adequately to meet the society's needs.

III. DEFINITIONS OF ARABIC TERMS USED

'Ain Spring.

- Baladiyah A municipal office, which was introduced into the Eastern Province in the early 1930's.
- Majlis Entertaining room, sitting room, or reception room.
- Omdah A mayor or a head of a town. This is an elected position by the male citizens of a town. It is merely a ceremonial position, with no political or executive powers. The omdah's authority lies in his major responsibility of being an arbiter.
- Qalatah A tax levied by the Saudi Arabian government on pearl divers. It is the amount of one extra diver's share. For example, if a boat employed twenty divers, the catch was divided on the basis of twenty-one, with the government taking the value of the share of the extra man.

Rahmaniyyah A gift of God, Who is the Compassionate. This term is illustrated as follows. A citizen of Tarut Island, for instance, chooses a piece of property and decides to build on it. At this time he feels that he is obligated neither to register this property with the municipality nor even to pay for its cost. The reason is that it is a "gift of God" and the government should not profit from its use.

Riyal Saudi Arabian currency, 4.5 of which are the equivalent of one American dollar.

Sabkhah According to the definition provided by Dr. Grover Brown, head of the Arabian American Oil Company, sabkhah means "silt, clay, and sand flats, often with a saline incrustation."

Sunnis and Shi'ites The Islamic religion is divided into two factions, the Sunnis and the

Shi'ites. This division arose out of the fact that the Prophet Mohammed died without designating a successor as the temporal and spiritual head of the Islamic faith. Three caliphs succeeded the Prophet before these two factions finally evolved. The three caliphs were Abu Bakr, Omar, and Othman, in the order of their reign. Othman was assassinated and this added to the confusion and complexity of the situation, which found the Muslim Empire without an undisputed successor. It was only at this time, some "twenty-two years later"¹ that these factions clashed. The Sunnis claimed the right to nominate a successor, who was Muawiyah. The Shi'ites, on the other hand, contended that Ali ibn abu Talib, the cousin of the

¹Lands and Peoples (New York: The Grolier Society, 1957), III, p. 365.

Prophet, should be the divine successor. Eventually, Ali did become the fourth Caliph, but the two factions have remained in conflict through the centuries. Moreover, this religious conflict has now become part of the social, economic, political, and cultural environment.

IV. METHOD OF RESEARCH AND SCOPE OF THIS STUDY

The Arabian American Oil Company (ARAMCO) in Dhahran, Saudi Arabia, approached the writer of this thesis during his 1962 summer vacation and suggested that he prepare a research report on Tarut Island, which is in the Persian Gulf of the east coast of Saudi Arabia.

Mr. Frank Patterson, Head of the Arab Development Department in ARAMCO, pointed out that his department knew very little about this Island, since the oil excavations of the company fell outside Tarut's territory. The author was therefore assigned the responsibility of conducting basic research and compiling information on Tarut Island which might aid the company in the formulation of a policy

pertaining to Saudi Arab employees.

The assignment was definitely challenging since little documentary information of significance had been written about the Island.

Mr. George Maranjian, of the Personnel Division of the General Office of the Industrial Relations Department, provided this writer with all of the information on the Island which they had on hand. Specifically, this information consisted of the 1958 and 1961 surveys of Saudi Arab employees, which were compilations of statistical data from all communities in the Eastern Province.

A second source of available information was a malaria survey conducted in 1961 by the Ministry of Health. This was a door-to-door survey of all Tarut Island's residential districts. One of its limitations, however, was the fact that it was not designed to furnish the specific information required in this type of study. The writer's own inquiry led him to discover that sometimes more than one family occupied a dwelling unit. Furthermore, the male members of the families were almost always away from the residences, either seeking or performing some type of employment. It must be pointed out, however, that although this survey inevitably will fall short of the actual truth,

it is the only one in existence that attempts to solve a problem on the Island through scientific means.

A third source of information was the Research Division of ARAMCO, under the directorship of Mr. Malcom Quint. Mr. Quint had prepared numerous sociological reports on Qatif and its contiguous communities, one of which is Tarut Island. The Arabian American Oil Company allowed the writer to have complete access to these reports for both the ARAMCO study and for this thesis.

In the final analysis, some of the facts in this thesis which deal directly with Tarut Island are based upon the above-mentioned sources of information. The majority of the information utilized, however, is based on the author's own interviews, personal experiences, and collection of facts and statistical data. These were compiled from Tarut Island and its contiguous communities, from a branch of the Ministry of Health in Dammam, and from the Arabian American Oil Company. This writer, therefore, holds himself completely responsible for the interpretation and application of the data, and the manner in which he attempted to identify the major problems in the local governmental administration of Tarut, as well as for the suggestions for improving conditions on the Island.

CHAPTER II

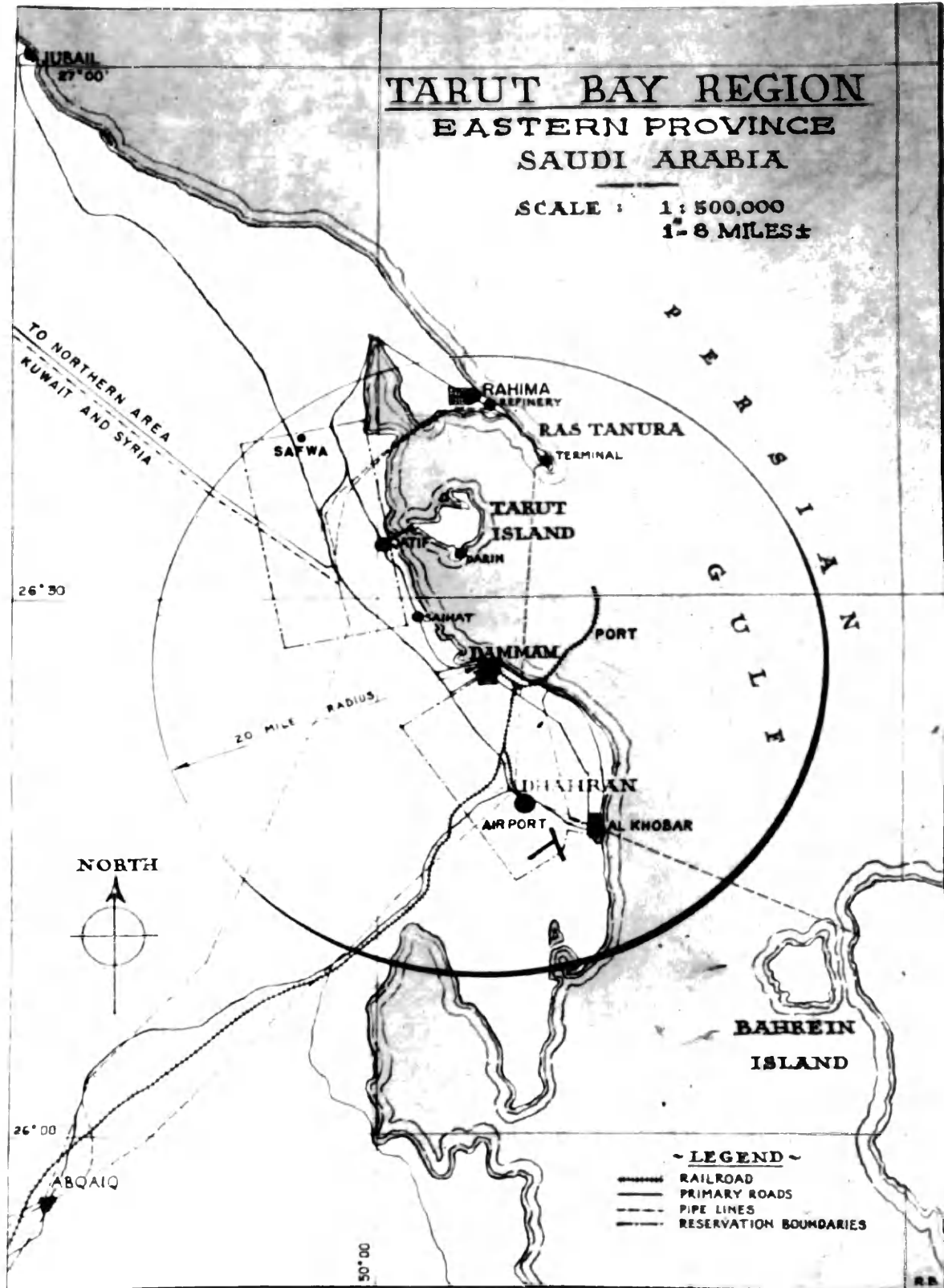
GEOGRAPHICAL SETTING

I. GEOGRAPHIC LOCATION

Tarut Island is located at latitude $26^{\circ} 35' N$ and longitude $50^{\circ} 05' E$. The Island has an area of approximately six square miles (with a maximum width of three and a half miles east to west and a length of four miles north to south) (see map, Figure 1). Its historic boundary lies two and a half miles from the town of Qatif on Saudi Arabia's eastern coast. Directly south of Tarut are located the other of the so-called Bahrein Islands, the city of Dammam (capitol of the Eastern Province), and Dhahran, the administrative center of the Arabian American Oil Company. In the northern part of the Island is the town of Ras Tanura, which contains a major refinery.

At low tide, until recently, the short distance between Tarut Island and the town of Qatif used to be waded

Figure 1.--Map of Tarut Bay Region in
the Eastern Province of Saudi Arabia.



on foot or crossed riding on gari (carts drawn by donkeys and having two rubber wheels). This method of communication was discontinued with the recent (1962) construction of a causeway between Tarut Island and the Qatif mainland (see Illustration 1).

Naturally, Tarutis accepted this new roadway with favor since lack of easy access had been one of the causes of the Island's stagnant economy and, in the words of Professor F. W. Riggs, its "closed"¹ class structure. Professor Riggs meant by this term that a person in such a society must remain throughout his life in the class in which he was born. It is important, however, to note that physical isolation did not prevent Tarutis from transporting their agricultural products and fish catches on donkeys across the shallow waters of the Persian Gulf to the Khamis (Thursday) Market in Qatif.

II. TOPOGRAPHY AND CLIMATE

Tarut Island has a flat topography, a factor which should facilitate the Island's potential industrial development. Up to the present, however, the natural provision

¹F. W. Riggs, The Ecology of Public Administration (New Delhi: Asia Publishing House, 1951), p. 23.



Illustration 1.--Causeway built in
1962 which links Qatif and Tarut Island.

of the topographical pattern in Tarut has not been utilized advantageously due to the lack of industrial development on the Island. However, with the proposed establishment of a pilot experimental and demonstration farm and agricultural training center at the Qatif Oasis in the Eastern Province, the availability of suitable land for industrial development should be inherent. The climate in Saudi Arabia varies, relatively speaking, from one region to another. In the Eastern Province, summer temperatures exceed 120° F. in the shade, although other regions in the Peninsula also share similar temperatures. Furthermore, the summer season is longer than in more temperate regions. The dryness of the interior makes the heat more endurable than along the coasts and, more specifically, along the coast of Qatif where the humidity is high, particularly at night.

The climate in the spring and fall is pleasant, with cool nights and sunny balmy days. In the Eastern Province, the prevailing wind comes from the north-north-west. Although this wind, the shamal, frequently whips up sand storms in its path, it cools the land somewhat.

The average fall of rain on Tarut Island is under four inches a year. The rains in the Eastern Province usually start in November or December and end in May. When

rain does fall in the country, it is likely to come in torrential downpours and to cause flash floods which do considerable damage to homes and cultivated fields. Rainfall over most of the peninsula is not sufficient to support much vegetation. However, in many areas the water collects in underground strata and can be utilized by means of wells. This latter point will be discussed further in a later chapter when the problem of water in Tarut is analyzed.

III. RESOURCES

The three basic resources on Tarut Island are pearling, fishing, and agriculture. Of these, fishing and agriculture are the most important inasmuch as they make up the major portion of the Island's economic base. Unfortunately there are no statistical data to substantiate any of the following statements because no records are kept on these transactions. The writer can provide only the general consensus of the merchants, together with their personal evaluations as to the authenticity of the facts.

Pearl Diving

According to Nasir ibn Rashid al-Khatiri, a leading

citizen of Jubail and owner of a pearling boat,

Five to ten years ago not more than three pearling boats were regularly operating out of the town of Jabail. Now there are more than a hundred. Over half of the boats owned in al-Jubail are new, and thirty of them are motor-driven launches built in Bahrain in the last three years.²

Nasir had not visited Darin or Tarut Island for some time, but he wrote that it was his understanding that the pearling business was also booming there. Even allowing for a certain exaggeration in Nasir's report, commented William E. Mulligan, of the ARAMCO Research Department, "There is no question but that the pearling industry is more active in Saudi Arabia than it has been for years."³

Aside from outside economic factors affecting the demand for pearls, two local phenomena probably have a bearing on the situation. They are:

1. For three years the Saudi Arabian government has not collected the qalatah, the tax amounting to one extra diver's share.⁴ In the past

²"Increase in Local Pearl Fishing in Dammam, Saudi Arabia," memorandum from Mr. Stauffer to the files of the Arab Development Department, Dhahran, Saudi Arabia, 13 September, 1956.

³Ibid.

⁴Supra, p. 6.

this meant that if a boat employed twenty divers, the catch was divided on the basis of twenty-one, with the Government taking the value of the share of the extra man.

2. The recent influx of people from Oman and southern Arabia has provided a pool of able-bodied men from which the pearlers are recruiting nearly all pullers and divers. Five years ago, based on ARAMCO's recruiting experiences, it would have been almost impossible to man a hundred boats with able-bodied men from the Tarut Bay area.

This boom in the pearling market is also confirmed in numerous ARAMCO memoranda⁵ that good catches and good prices have undoubtedly been the basic reasons for the increased activity in al-Jubail, Darin, and Bahrain.

Fishing

Superficial reports⁶ in the Arab Development Department in Dhahran indicate that the quantity of fish near

⁵ ARAMCO memoranda, Mr. Stauffer to Arab Development Department, Dhahran, Saudi Arabia, 1956-1962.

⁶ Ibid.

the shores of the Island is insufficient to warrant any industrial development on a commercial scale. One specific report states:

No information is available as to the quantities of fish and shrimp that might be caught by modern trawlers in the Persian Gulf. What we hear as plenty of fish and shrimp to support a catch of ten or twenty tons per day is only hearsay and guesses on the part of Tarutis.⁷

This same report indicates that trawling in Tarut Bay has been attempted on a trial basis, but that the nets were torn up either by sharks or coral.

The problem currently is the lack of precise data as to the potential fish and shrimp catch of the Tarut offshore area. However, it must be noted that this insufficiency relates only to large-scale commercial enterprises and not for quantities required to meet the market demands in the Eastern Province. It must be pointed out also that even if there were enough fish and shrimp to warrant a commercial supply, another problem would be the existence of a fishing concession for all waters in the Persian Gulf. According to a fishing industry report, this concession had been granted by Amir (Prince) Mut'Ab "to Khalifa al-

⁷ARAMCO memoranda, Mr. Stauffer to Arab Development Department, Dhahran, Saudi Arabia, June 27, 1962.

Gasaibi, for all waters in the Persian Gulf."⁸ Gasaibi is a merchant and owner of the biggest and finest cold storage plant in the Dammam-al-Khobar area. The report also stated that Gasaibi intended to build a fish and shrimp processing and freezing plant of three tons per day capacity in Dammam, and that he would own and operate his own fleet of trawlers.

Ultimately this means that no organized private group would be able to establish itself in the fish and shrimp business on a commercial basis without having either to deal with Gasaibi or to accept his monopolistic control of one of the two major means of livelihood in the Persian Gulf.

Agriculture

Although fishing and, to a lesser extent, pearl diving, as described above, furnish the secondary sources of income for the inhabitants of Tarut Island, agriculture has been the main source of livelihood. The date crop is, at present, the major source of cash income for the natives of the Island. In addition, most of the farms on the

⁸Ibid.

Island have large acreages of alfalfa and a few acres devoted to growing tomatoes, head lettuce, romaine lettuce, and similar crops. It is not surprising to find a low agricultural production rate on Tarut Island, since there is a similar problem throughout the country.

Outside of the oil section and small modern sectors based primarily on imports and distributive trades and services, Saudi Arabia has a largely pastoral and agriculture subsistence economy. In spite of the preponderance of agriculture, the bulk of the food requirements of the country are being met by imports. In the country's present programming for economic development, the government is assigning foremost importance to measures concerning the expansion of agriculture. Since water is the principal limiting factor at present, concentrated efforts are being made towards the implementation of a comprehensive water resources development program.

How does this planned agricultural expansion affect Tarut Island? Dr. Grover Brown, Coordinator of the Agricultural Department in ARAMCO, has pointed out:

The first and most important need is to introduce modern irrigation and drainage systems. Such a step [he added] will reclaim idle salty land,

increase the cultivatable area and the agricultural returns will be higher.⁹

This system would enable the farmers to increase acreage of alfalfa as well as to increase alfalfa yields. Farmers will also be encouraged to raise larger numbers of sheep, which are to be fed mainly on locally-grown crops such as alfalfa and dates. The number of date palm trees will be increased by planting on reclaimed land, and the yield per acre and the return per pound would also be expected to increase. Since, in the past, farmers were not advised as to the varieties of dates that would assure maximum yield, most of the dates grown on Tarut produce low yield and are not of top quality.

The writer of this thesis recommends that, in order for the Island to achieve the above-outlined objectives, it is essential that several studies should be undertaken.

First a study is needed in order to determine the varieties of dates already existing on Tarut Island, together with the yield and quality of each variety. From such a study it would be possible to plan to plant the

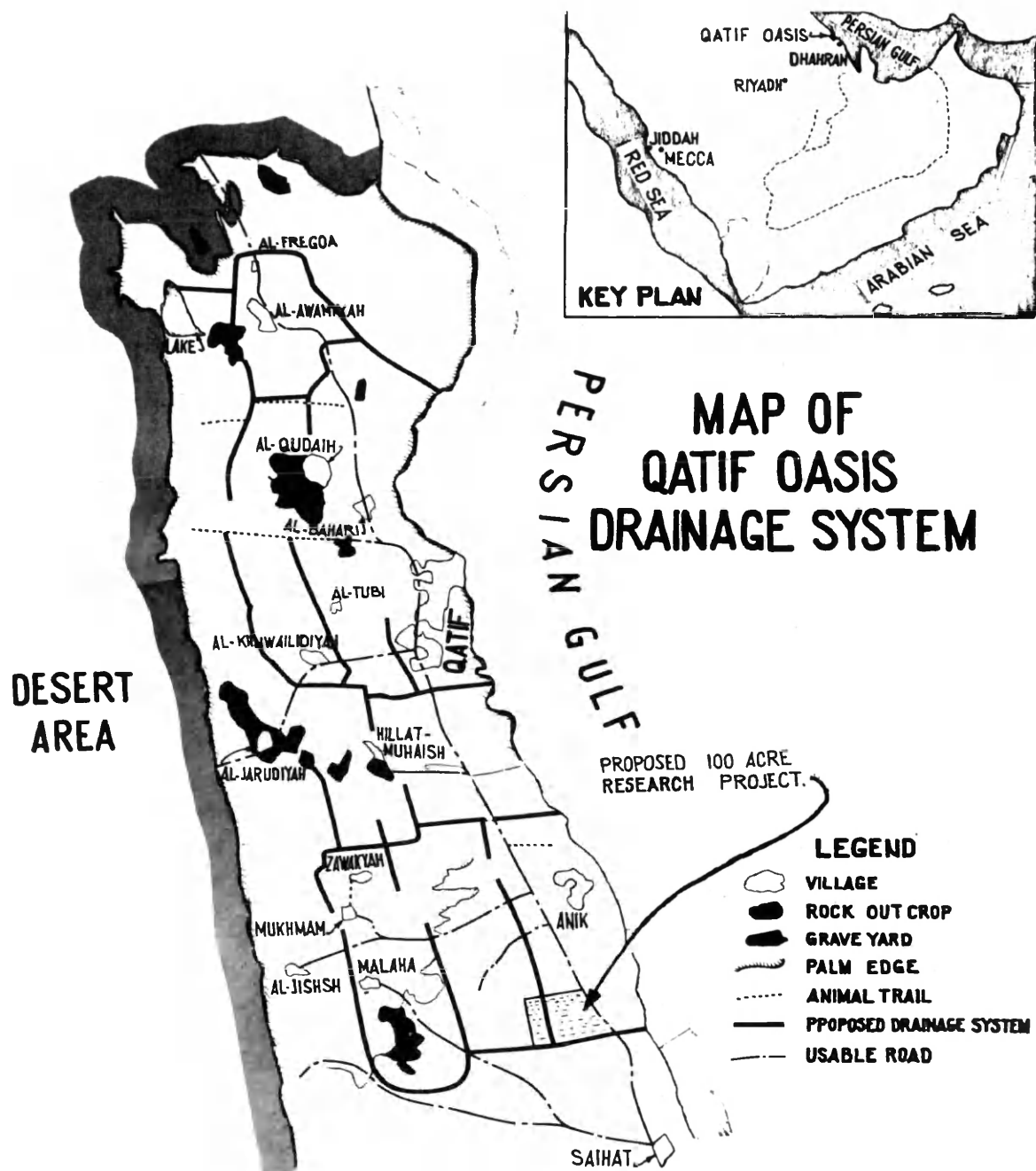
⁹Personal interview with Dr. Grover Brown, Coordinator of the Agricultural Department, ARAMCO, July, 1962, in Dhahran, Saudi Arabia.

good-yielding varieties which would tend to improve the quality and increase the yield of dates grown on the Island.

Second, a soil survey is needed to determine the classes of soil that exist. From this, the agricultural scientist would be able to classify the total land of Tarut Island in degrees of productivity--from the most productive to the least productive land.

Third, a study should be made to classify the size of the holding of each farm family in order to provide some means of support for those families in Tarut who depend on this type of work for their living. The Ministry of Agriculture would then be able to provide Tarut Island with drainage and irrigation systems as it has to the neighboring community of Qatif (see map of Qatif Oasis drainage system, Figure 2). This is essential because the town of Qatif and all the date-growing communities contiguous to it (within a twenty mile radius, according to the Arab Development Department) are recognized by ARAMCO agriculturists as the center of the second most-important date-growing district in the entire country. According to Dr. Brown, "This will further encourage the growth of certain types

Figure 2.--Map of Qatif Oasis Drainage
System.



of tropical and subtropical fruits as grapes, papayas, figs and pomegranates in Tarut."¹⁰

A fourth study should be conducted to determine the potential market for these products in the Eastern Province, nationwide, or in other countries, as the case might be. This should designate an overall agricultural pattern, and at the same time should recommend whether it should be established on the basis of individual land ownership which exists today or whether a new cooperative basis should be instituted.

In order to achieve these objectives, the government, acting under the Ministry of Agriculture, should bring in experts to study and make recommendations regarding each of the factors discussed: irrigation, drainage, water, agriculture, and marketing. This is essential in order that maximization of agricultural benefits may be achieved and maintained.

Quoting from a recent report, the Saudi Arabian government

. . . proposes to establish a Pilot Experi-

¹⁰Ibid.

mental and Demonstration Farm and Agricultural Training Center at the Qatif Oasis of the Eastern Province, and had requested the United Nations Special Fund assistance towards this purpose. The estimated total cost of the project, over a five year period, is around U.S. dollars \$1,300,000. The Government of Saudi Arabia is prepared to contribute a sum of around \$783,000 and requested financial assistance of the order of \$517,000 from U.N. Special Fund.¹¹

It is planned that the project should be established on a government-owned tract of about one hundred acres in the region between the towns of Anik and Saihat at the Qatif Oasis in the Eastern Province. The Qatif area, which includes Tarut Island, commends itself to the location of the project, not only because of its accessibility to the principal marketing centers of the Eastern Province and Riyadh City, but also because of the availability of adequate water and good land for immediate exploitation. The general objective of the project, however, would be to contribute to the agricultural and livestock development of the Eastern Province as a whole.

Furthermore, the experience and training acquired by Saudi personnel working on the project would help in

¹¹Government of Saudi Arabia, "Report on the Establishing of a Pilot Experimental & Demonstration Farm & Agricultural Training Center," October, 1961 (mimeographed).

the setting up of similar demonstration farms and training centers distributed throughout the various regions of the country in a phased manner.

IV. SUMMARY

To summarize, the idea of an integrated agricultural industry in Tarut Island should no longer be regarded by Tarutis as far-fetched, inasmuch as the establishment of the pilot and the experimental centers in Qatif, a distance of only two and a half miles from Tarut, is now a reality. This type of agricultural industry in Tarut will naturally encourage employment in this vocation, which at present is negligible considering the fact that agriculture is the major resource on the Island. This should, in turn, stimulate the economic growth of the Island and enable Tarut to compete, to a degree, with local markets in a more specialized way.

Tarut has many existing internal problems that have prevented it from progressing as a primarily industrial society. Some of these problems have already been discussed. However, others include poverty, unhealthy living conditions, unemployment, lack of streets (only footpaths) and transportation, lack of modern facilities for agricul-

tural development, and, above all, the lack of an efficient, authoritative, organized, and responsible municipal government. Each of these shortcomings has created a chain of problems which, unfortunately, has tended to destroy the image of this historic community.

CHAPTER III

CULTURAL AND SOCIAL ORGANIZATION

Social structure has been defined as "the whole network of social relations in which are involved the members of a given community at a particular time."¹ Tarut Island has a "closed"² class structure, wherein a person must remain throughout his life in the class in which he happened to have been born. This is in contrast to the open system, where "it is easy and usual for a person to move up and down in class status."³ Tarut Island is also a tradition-oriented society, which extols the virtues of the past, both consciously and subconsciously, and which

¹Committee of the Royal Anthropological Institute of Great Britain and Ireland, Notes and Queries on Anthropology (6th ed.; London: Routledge and Kegan Paul, Ltd., 1949), p. 63.

²F. W. Riggs, The Ecology of Public Administration, New Delhi: Asia Publ. House, 1961), p. 23.

³Ibid., pp. 23, 24.

rejects innovations in the sphere of social relations. Individuals within the society exhibit some degree of variation from the traditional norms of the group, and this variation is perhaps greater among ARAMCO employees than among any other segment of the population. The variation, however, is limited by a number of factors, chief of which is the inability of the Tarutis to live outside their own culture. In an economic sense there is no reason why the progressive company employee from Tarut, or Qatif for that matter, could not withdraw physically from his cultural environment and re-establish himself in a less traditional community. The employee could support himself and his family with his wages and could certainly take advantage of the Home Ownership Program--ARAMCO finances the construction of the home, making no interest charge and receiving approximately two-thirds of its original investment in the construction--to provide himself with housing of a type superior to that which he now has.

Why, then, does the Taruti, who often rails against the restrictions which are placed upon him by his tradition-oriented society and who has an avenue of escape, reject the notion of making a change? Essentially, the Taruti does not and can not turn his back on his cultural environ-

ment because he is not prepared to cope with life outside his own social group. He can hardly conceive of life lived among strangers; i.e., people not connected to him by ties of blood and marriage. Social groups on the Island seldom visit each other's majlis (entertaining rooms) under normal circumstances, with the exception of the ARAMCO employees who exchange visits periodically.

I. HISTORICAL BACKGROUND OF EASTERN REGION OF SAUDI ARABIA

According to the Encyclopedia of Islam,⁴ the group of islands located in the Persian Gulf at latitude 26° N and longitude 50° 30' E are the Bahrain Islands. The name Bahrain (in Arabic meaning two seas) seems to have been derived from the topography of the land in the Eastern Province which stretches from Al-Hasa to the Persian Gulf and divides the sea. In the first century A.D. Pliny the Elder remarked that "Since ancient times Bahrain has been famous for the quality of its pearls."⁵ Another brief

⁴Encyclopedia of Islam, ed. M. Th. Houtsom, T. W. Arnold, R. Basset, and R. Hatmann (Published by Leyden Late and E. J. Brill, Ltd.; London: Luzac & Co., 1913), I, 584-585.

⁵Encyclopedia Americana (New York: Americana

reference in the Encyclopedia of Islam concerned the Elder Sargon (2360 B.C.) whose conquests included the Bahrain Island and who later established the first empire of recorded history, the Akkad Empire, later to be known as Babylonia.

Tarut Island is one of these historic islands which was known only by the name of the small village at its southern tip, Darin."⁶ In addition to its fame for its pearl fishing, Tarut was also famous as one of the great ports for spices and musk that were imported from India and the Far East. The choice of Tarut Island as a strategic international trading center was certainly not accidental, but was due rather to its location along the route from the mainland (Qatif town) leading to Syria, Egypt, and Greece. A second reason for the historic importance of the Islands was the quality and quantity of the date produce of the region, particularly that of Qatif, which was in demand in India, China, and East Africa. A third factor in its importance may be illustrated by the different inhabitants of

Corp., 1957), III, 48a.

⁶ARAMCO, Arab Relations Department, Research and Translation Section, "Report on Tarut Island" (Dhahran, Saudi Arabia, n.d.) (typewritten).

the Island as well as the entire district of Al-Hasa; these included a great number of Jews, Nestorian Christians, and Zoroastrian Persians.

Following the death in 632 A.D. of the Prophet Muhammed, a revolt broke out in the Qatif area and a punitive expedition was dispatched by the first Khalif, Abu Bakr, for the announced purpose of restoring order but actually and primarily to spread the Islamic religion to this region of the Peninsula. The people of Tarut refused to acknowledge the supremacy of Medina as the new religious center until they were finally reduced to terms as the result of an invasion. With the growth of the Islamic Empire, there was a shift in importance of the various ports of the Peninsula. Unfortunately, this shift reduced the prominence of Tarut as an international port, causing a noticeable economic set-back in its date production, pearls, and other commodities, a reversal that has remained unchanged to the present time.

Abdul Hafiz Kamal, head librarian in the Department of Arabian Affairs of ARAMCO, stated that, according to ARAMCO files, little has been written specifically about Tarut Island and that their records are not clear as to when the name was changed from Darin to its present name

of Tarut or the reason for the change.

However, it is believed that the Island had changed its name when the area became the refuge of the Schismatic Shi'ites and especially the Carmethians in the Tenth Century A.D. According to Aramco sources, Dr. Peter B. Cronwall, a Harvard University Archaeologist, who visited the Island in 1940, believes that the name "Tarut" is a shortened form of "Ashtarut," a variant of "Ish-tar," the Babylonian counterpart of "Venus."⁷

The Encyclopedia of Islam discusses two significant ancient settlements on the Bahrain Islands, a few of the traces of which are evident today in the Eastern Province.⁸ The first one, from 1507 to 1622, was a Portuguese settlement which had to be given up as a result of the loss of Hormuz and other important ports which formed keys to trade with India. This settlement is traceable in Tarut by historical landmarks, one example of which are the ruins of a palace in Qatif (see Illustration 2), and another is the fort at the entrance of Tarut Village (see Illustration 3). Archaeologists of ARAMCO believe that the fort was built approximately in the middle of the sixteenth century after Alfonso de Albuquerque captured Hormuz (1515).

⁷Ibid.

⁸Encyclopedia of Islam, op. cit., I, 584.



Illustration 2.--Ruins of an historical
palace built by the Portuguese in Qatif
outside Tarut Island.



Illustration 3.--Ruins of an old Portuguese fort overlooks the shopping center of Tarut Town.

The second major settlement was that of the Persians from 1735 to 1784, people who were overwhelmingly Muslim Shi'ites. The Persians during this period introduced their own ecological, social, and cultural environment to the entire Eastern Province. The Persians, unlike the Nomads (Sunnis) of this region, are Shi'ites who are town people who are not prepared to cope with life outside their own social group.

In December, 1915, at Darin, Sir Percy Cox, the British Resident in the Persian Gulf, signed the name of his government to a treaty which recognized Ibn Saud as the independent ruler of Najd and Al-Hasa. This acknowledgement by the British of Ibn Saud's claims was an important step in the development of the Saudi Arabian Kingdom. During the 1920's, soon after this formal recognition, Tarut Island was considered as a potential airbase in Saudi Arabia. However, the British, who provided some planes for Ibn Saud, decided with the government that, instead, an aviation school should be established in Taif for reasons of accessibility. That decision was another factor which led to the physical and social isolation of the Island.

II. RELIGIOUS SECTS OF ISLAM

The meaning and historical significance of two religious sects, the Sunnis and Shi'ites, was mentioned in Chapter I under "Definitions of Terms Used." However, it is necessary to discuss them here in their social context. Although there are no statistical data on the actual ratio between these two sects on Tarut Island, it is generally accepted by ARAMCO and by residents of Tarut, that the Shi'ites have a majority on the Island. Table I categorizes the communities of Tarut in terms of their respective religious affiliations, numbers of dwelling units, and the approximate total population of each community.

A survey of Saudi Arabian employees in ARAMCO conducted in 1958 showed that the Saudi employees from Tarut Island were divided between the Shi'i and Sunni religions, as listed in Table II.

Sunnis and Shi'ites on Tarut Island, as well as in the entire Eastern Province, make up the social structure of this region in Saudi Arabia. The Shi'ites are a long-settled, sedentary people who have traditionally identified themselves with Iraq and Iran. The Sunnis are recent settlers of Bedouin background, on the other hand, who identify

TABLE I
RELIGIOUS AFFILIATIONS OF TARUT ISLAND^a

Names of Communities	Religious Sects	Population	No. of Dwelling Units
Tarut Town	Shi'ites	1995	313
Sanabis	Shi'ites	2452	455
Rabi'Iyyah	Shi'ites)	1136	214
Rufayyi'Ah	Shi'ites)		
Fariq al Jabal	Shi'ites	377	72
Fariq al'Kharijiyyah	Shi'ites	332	49
Fariq al-Dashshah	Shi'ites	b	b
Fariq al-Atrash	Shi'ites	353	47
Fariq al Zor	Sunnis	156	44
Darin	Sunnis	<u>1291</u>	<u>322</u>
Totals		8092	1516

^aSource: 1961-62 Ministry of Health, Saudi Arabia, Malaria Survey.

^bNo figures given.

TABLE II
RELIGION OF EMPLOYEES FROM QATIF OASIS
AND TARUT ISLAND

Birthplace	Shi'i	Sunni	Total
Qatif Oasis			
Umm al-Sahik	-	50	50
Safwa	283	2	285
'Awammiyyah	136	-	136
Al-Qudaih	91	-	91
Sayhat	336	2	338
Qatif	91	3	94
'Anik	15	89	104
Al-Jishan	42	2	44
Umm al-Hammam	62	-	62
Al-Jarudiyah	32	-	32
Al-Khawaladiyah	29	1	30
Al-Tubi	44	-	44
Al-Bahari	29	-	29
Al-Ajam	33	1	34
Other Qatif Oasis	266	16	282
Total Number	1,489	166	1,655
Percentage	90.0	10.0	100
Tarut Island			
Tarut	245	3	248
Al-Sanabis	52	1	53
Darin	2	113	115
Al-Zor	-	17	17
Total Number	299	134	433
Percentage	69.1	30.9	100
Grand Total			
Total Number	1,788	300	2,088
Percentage	85.6	14.4	100

Source: 1958 Survey of Saudi Arab Employees, ARAMCO.

themselves with Kuwait and Najd and are a minority population in the Eastern Province. The Sunnis in Saudi Arabia regard the Shi'ites as second-class citizens because the Sunnis feel that the Shi'ites' religious beliefs tend to distort the Islamic doctrine inspired by the Koran and the Hadith (sayings of the Prophet Muhammed). Shi'ites are not permitted to perform their prayers in Sunni mosques because they do not abide by the doctrine and Pillars of Islam required of the Sunnis. The Shi'ites of Tarut Island are very much aware of the religious and cultural conflicts with the Sunnis and, therefore, limit their daily activities and social interaction to those areas that are dominated by their own social group. For instance, the Shi'ite inhabitants of Tarut Island do little traveling to other areas of Saudi Arabia for the purpose of seeking jobs, for they have the feeling that they may not be accepted by the Sunnis.

A survey in 1961 of Saudi Arab employees showed that of the 379 original families born in the town of Tarut (Shi'ite community), 355 or 93.7 per cent still have family residences there; this is in contrast to Darin (Sunni community) where of the 215 born only 87, or 40.5 per cent have present family residence in the town of their origin.

TABLE III
SAUDI ARAB EMPLOYEES PRESENTLY LIVING
ON TARUT ISLAND

Town		No. of Original Families	Existing Families	Per Cent of Original Families
Tarut Town	(Shi'ite)	379	355	93.7
Sanabis	(Shi'ite)	105	100	95.2
Darin	(Sunni)	215	87	40.5
Al-Zor	(Sunni)	26	10	38.5
Totals		725	552	76.1

Source: 1961 Survey Saudi Arab Employees.

III. POPULATION

According to the 1960 survey conducted by the Ministry of Health, the population of Tarut Island was estimated to be 8,534 persons. In 1961, however, another survey (Malaria) was conducted by the Ministry, and the population was estimated at 8,092 persons. No specific reasons were given for this decline from 1960 to 1961--a decline of approximately 442 persons, or 5 per cent, in a single year. The only explanation given by the ARAMCO Personnel Department was that, according to 1961 ARAMCO statistics, there was a tendency for the majority of the Sunnis and some of the Shi'ites from Tarut Island to move their residences nearer to their areas of employment. This is illustrated in Table IV.

On the other hand, ARAMCO also completed a survey in 1961 and estimated the population at 7220. This survey was compiled from aerial photographs, where the number of occupied dwelling units was multiplied by an estimated average number of persons per dwelling unit (8.3) to obtain an estimated population for the various villages of Tarut Island.

One further population estimate must be cited: the citizens of Tarut estimate their population at an exagger-

TABLE IV
SAUDI ARAB EMPLOYEES' DISTRICT OF EMPLOYMENT--TARUT ISLAND

Birth Place	Dhahran				Abqaiq				Ras Tanura				Total	
	1958		1961		1958		1961		1958		1961		1958	1961
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	No.
Tarut	126	27.4	178	24.6	12	2.6	33	4.6	322	70.0	514	70.8	460	725
Qatif	941	55.0	1,385	55.7	28	1.6	78	3.1	743	43.4	1,024	41.2	1,712	2,487
Total	1,067	49.2	1,563	48.7	40	1.8	111	3.5	1,065	49.0	1,538	47.8	2,172	3,212

Source: 1958 and 1961 surveys of Saudi Arab employees.

ated figure of 15,000 persons.

In reviewing the above-mentioned surveys, certain limitations in each of them are noticed. First, the Ministry of Health's survey is probably the most reliable because it is a door-to-door survey. However, it should be pointed out that the malaria report still fell short of estimating the correct population of the Island inasmuch as it omitted several pertinent factors. One of these, as mentioned in Chapter I, is that sometimes more than one family occupies the same dwelling unit. Another is that the male householders are sometimes away for a week or as much as a month at a time in the performance of their out-of-town jobs.

The survey conducted by ARAMCO is also reliable only to some extent since it, too, has its limitations. While the average number of persons per dwelling unit in the Ministry of Health's survey (5.3) was estimated as a result of a door-to-door survey, the ARAMCO survey based its estimate (8.3 persons per dwelling unit) on previous surveys of Saudi Arab employees. This average number of persons per dwelling unit may be accurate for the ARAMCO employees from Tarut, but it should not be accepted as a figure which is representative of the entire Island. This

reasoning is substantiated by the 5.3 persons per dwelling unit estimate arrived at by the Ministry's survey. The third estimate, that of the Tarutis, that their population is approximately 15,000, must be considered an exaggeration and must be disregarded, because it has no scientific foundation.

The writer has, therefore, taken the liberty of selecting the Ministry of Health's survey of Tarut Island as being the most reliable population statistic available to date. However, due to the limitation explained above, and adding an arbitrary figure covering the few Tarutis who live on farms and in other nonresidential structures (such as tents), the population of Tarut Island is rounded to an estimate of 10,000 persons.

IV. CLASSIFICATION OF POPULATION

The writer's empirical observation of Tarut Island and its male inhabitants has led him to adopt the following personal population classification: peasants, progressivists, and traditionalists. Before proceeding with a discussion of each of these categories, it is important to note that this classification is attempted by the writer only to aid the reader in identifying the socioeconomic

groups within the Island. This is a rather difficult task because Tarut is a classless society.

The Peasants

The peasants represent the majority of the population. The characteristics of a peasant are symbolized in the following manner: unemployed, poor, illiterate, and basically dependent on his son or sons (if any) to support him. Otherwise he is usually found in the market place (see Illustration 4) awaiting an opportunity to give a hand on a farm or carry water to a certain place, or some similar chore. It is unfortunate that the government, through the Ministry of Labor, has not been providing this group with low-income-housing and certain financial subsidies to help them. Only very few of these Tarutis can be trained to work. Those who can be trained are, in general, the younger generation which is not qualified to work for ARAMCO but does work on farms and in similar vocations (see Illustration 5). The rest are simply too old to care; they are either sick and need medical help or too lazy to attempt even to seek employment.



Illustration 4.--Taruti peasants (squatting on their haunches at left side) in the shopping center of Tarut waiting for jobs.



Illustration 5.--Building a house in Tarut using the unskilled labor of the peasant class.

The Progressivists

The progressivists are represented by the employees of ARAMCO and are so called because their characteristics are more progressive than those of other Tarutis (see Illustration 6). To be a progressivist a man must be educated; he must be in satisfactory financial position to enable him, for instance, to participate in the Home Improvement Program; and it is necessary for him to be a reformist from the old, national, social, and supernatural traditions⁹ of the Island.

Surprisingly, the previous tendencies of Tarutis to disrespect the progressivists for breaking away from the normal social traditions of the Island are gradually disappearing. Today Tarutis in general tend to envy the qualities of a progressivist. This is especially true of the traditionalists who are forced to look up to the progressivists as their leading and most active citizens. When this writer asked approximately fifty Taruti peasants at random the following question: "How would you dispose of

⁹Supernatural tradition means the elements that cannot be explained scientifically by the society, like magic, superstition, etc.



Illustration 6.--An ARAMCO employee who
is an example of a progressivist.

5,000 riyals (\$1,100) if you had won it in a contest?" their answers may be summarized as "acquiring an education and owning a home." It is understandable that a Taruti peasant would like to improve the quality of his thinking through education and the measure of his standard of living through specialized employment. But he finds himself in a dilemma where he has two choices. On the one hand, if he is a traditionalist, he will not be able to change readily the customs and traditions that he has developed over the years. On the other hand, if he is young and his future is undecided, then he is confronted with two alternatives: either his family ties are too strong to permit release from his traditionalist environment or, simply, he cannot afford the changes in the attitudes of his friends and neighbors toward him.

The Traditionalists

The traditionalist group is represented by a Taruti who should have the following characteristics: he should be elderly, wise and judicious, and literate; he must be a father of sons; he should be pious, tolerant, and a symbol of the traditions indicative of this society. A traditionalist may be elected omdah of his community.

V. FAMILY INSTITUTIONS CHARACTERIZED

The family on Tarut Island belongs to one of three basically interrelated classifications:

1. Patrilocal, which implies the rule of residence where the son, after marriage, brings his wife to his father's house.
2. Patrilineal, which means that descent is recorded through the father.
3. Patriarchal, which indicates that the father is the head of the family.

It is difficult to delineate these classifications since they are all interrelated within the family unit. The writer has attempted to separate them only insofar as their respective definitions are concerned.

On Tarut Island, as well as in most of Saudi Arabia, the entire family unit bows to the wishes of the head of the household, be he father, uncle, or brother. The obedience of family members to the head of the household can be explained in terms of the child-rearing practices quoted from Pati Raphael's work on family institutions:

. . . The basic educational aim pursued by the family, is to mold the child into an obedient,

subservient and loyal member of the family. . . . What the growing child has to learn is to subordinate his wishes to those of the father, and to reach an emotional state where he can actually identify psychologically his own interests with those of his father and the rest of the family. Only when he has learned that the interests of the family come first, has he reached a stage of development recognized as mature and satisfactory. Only when he can govern his actions with the family point of view can he hope to achieve a status of recognition and possibly even leadership.¹⁰

Thus, anything that tends to weaken the cohesiveness of the family is met by a reaction which, in effect, strengthens the family's cohesiveness. One extremely important method of minimizing conflict within the family and preventing the attenuation of family solidarity is the widespread practice of cousin marriage. A parental cousin (a father's brother's daughter) is considered by Tarutis to be the most desirable bride and, if a parental first cousin is unavailable, then the next most desirable bride is a relative on the father's side; i.e., a second or third cousin. If no parental relative is available, a bride is then sought from among the maternal relatives. It is only rarely that a Taruti takes his bride from outside his

¹⁰Pati Raphael, Sex and Family in the Bible and the Middle East (New York: Doubleday, 1959), p. 212.

tayifah (paternal relative) or nasibah (maternal relative). This practice of endogenous marriage serves constantly to reinforce the bonds between family members and to strengthen family solidarity.

Because the family is such a vital focus of a Taruti's social relations, the family residence assumes a very special importance in his eyes. It is a matter of pride for a Taruti to say that he lives in his grandfather's house and often he is born and dies in the same house or at least in one of the houses built on the same land. Physically, the house may bear little resemblance to the original house since rooms are added as a need arises and other rooms are allowed to deteriorate. The emotional attachment is not to the bricks and coral of the house itself, but rather to the abstract concept of the hearth, the home, and it is for this reason that a Taruti thinks of the house in which he lives as baituna (our house).

VI. SOCIAL IMMOBILITY

Since the social system under which the Taruti lives ties him to his birthplace, it is unrealistic to expect significant numbers of these people to obtain houses elsewhere. This is true also of ARAMCO employees

from Tarut who form the smallest group of participants in company Home Improvement Programs outside of Tarut. According to the Arab Development Department in ARAMCO, some Tarutis, as time goes on, will move from the Island to Dammam, Al-Khobar, and perhaps even to Rahimah. The employees who do move, however, will be different from their fellow Tarutis in that they will undoubtedly be better educated, will hold higher-level positions, and will have longer periods of company service. All will probably either have a history of family conflict or will have experienced the death of a father or elder brother before moving. Primarily, the reason for this social immobility is the dominance of the Shi'ite inhabitants in Tarut. As described above, they are reluctant to resettle their families beyond the confines of the neighboring town of Qatif, which is approximately two and one-half miles from Tarut Island.

VII. EDUCATION AND LITERACY

With the exception of the ARAMCO employees, Tarutis' educational and literacy status is minimal. In 1958 a survey of Saudi Arab employees, conducted by the ARAMCO Personnel Department, showed the number of years of school-

ing (prior to employment in ARAMCO) that employees from Tarut Island and Qatif Oasis had completed. These data are presented in Table V.

Of the 455 ARAMCO employees from Tarut, only 11, or 4.8 per cent, had from 6 to 12 years of pre-employment schooling, while 345, or 75 per cent, had none at all. The figures in Table VI show that of the 455 Tarutis employed in 1958 only 130 employees, or 28.6 per cent, could read and write Arabic, and those in Table VII that 151, or 33.2 per cent, could read and write English.

These statistics are presented to show that, given the opportunity, Tarutis take advantage of the educational programs provided by ARAMCO. It must also be remembered that for centuries these people have worked as farmers, divers, and fishermen without any need for resorting to an academic education or an understanding of technology as prime factors of employment.

Another survey of the Saudi Arab employees conducted by the Arabian American Oil Company in 1961 showed that, while the number of employees from Tarut increased from 455 to 552 from 1958 to 1961, the illiteracy rate increased from 6.7 per cent (318 illiterate in 1958) to 7.2 per cent (335 illiterate in 1961). Naturally, these

TABLE V

YEARS OF SCHOOLING (PRE-EMPLOYMENT) OF EMPLOYEES
FROM QATIF OASIS AND TARUT ISLAND

Birthplace	Years of Schooling				Total
	None	1-3 Years	4-6 Years	7-12 Years	
<u>Qatif Oasis</u>					
Umm al-Sahik	35	11	6	1	53
Safwa	235	41	25	2	303
'Awammiyyah	117	16	4	--	137
Al-Qudaih	76	7	5	3	91
Sayhat	256	52	28	3	339
Qatif	59	19	12	6	96
'Anik	87	20	2	--	109
Al-Jishsh	28	10	7	1	46
Umm al-Hammam	43	12	8	--	63
Al-Jarudiyah	24	6	2	--	32
Al-Khawaladiyah	25	3	1	2	31
Al-Tubi	36	3	4	1	44
Al-Bahari	26	3	2	--	31
Al-Ajam	30	2	4	--	36
Other Quatif Oasis	175	43	66	10	294
Total Number	1,252	248	176	29	1,705
Total Per Cent	73.5	14.5	10.3	1.7	100.
<u>Tarut Island</u>					
Tarut	215	26	18	2	261
Al-Sanabis	45	6	2	--	53
Darin	68	14	29	9	120
Al-Zor	17	3	1	--	21
Total Number	345	49	50	11	455
Total Per Cent	75.8	10.8	11.0	4.8	100.
Grand Total Number	1,597	297	226	40	2,160
Grand Total Per Cent	73.9	13.8	10.5	1.8	100.

Source: 1958 Survey of Saudi Arab employees.

TABLE VI
ARABIC LITERACY OF EMPLOYEES FROM QATIF OASIS
AND TARUT ISLAND

Birthplace	Read and Write Arabic			Total
	Neither	Read and Write	Read Only	
<u>Qatif Oasis</u>				
Umm al-Sahik	31	19	3	53
Safwa	222	80	1	303
'Awammiyyah	112	21	3	136
Al-Qudaih	76	16	--	92
Sayhat	254	76	8	338
Qatif	51	41	4	96
'Anik	81	25	3	109
Al-Jishsh	25	21	--	46
Umm al-Hammam	41	19	3	63
Al-Jarudiyah	22	9	1	32
Al-Khawaladiyah	23	7	1	31
Al-Tubi	37	7	--	44
Al-Bahari	28	3	--	31
Al-Ajam	29	7	--	36
Other Qatif Oasis	174	117	4	295
Total Number	1,206	468	31	1,705
Total Per Cent	70.7	27.5	1.8	100.
<u>Tarut Island</u>				
Tarut	201	55	5	261
Al-Sanabis	44	7	2	53
Darin	53	65	2	120
Al-Zor	17	3	1	21
Total Number	315	130	10	455
Total Per Cent	69.2	28.6	2.2	100.
Grand Total Number	1,521	598	41	2,160
Grand Total Per Cent	70.4	27.7	1.9	100.

Source: 1958 survey of Saudi Arab employees.

TABLE VII
ENGLISH LITERACY OF EMPLOYEES FROM QATIF OASIS
AND TARUT ISLAND

Birthplace	Read and Write English			Total
	Neither	Read and Write	Read Only	
<u>Qatif Oasis</u>				
Umm al-Sahik	33	20	--	53
Safwa	210	93	--	303
'Awammiyyah	101	34	1	136
Al-Qudaih	67	24	1	92
Sayhat	230	105	3	338
Qatif	50	46	--	96
'Anik	82	26	1	109
Al-Jishsh	28	18	--	46
Umm al-Hammam	41	21	--	62
Al-Jarudiyah	21	12	--	33
Al-Khawaladiyah	25	6	--	31
Al-Tubi	35	9	--	44
Al-Bahari	26	4	1	31
Al-Ajam	26	10	--	36
Other Qatif Oasis	<u>171</u>	<u>124</u>	<u>--</u>	<u>295</u>
Total Number	1,146	552	7	1,705
Total Per Cent	67.3	32.3	0.4	100.
<u>Tarut Island</u>				
Tarut	186	75	--	261
Al-Sanabis	35	18	--	53
Darin	67	52	1	120
Al-Zor	<u>15</u>	<u>6</u>	<u>--</u>	<u>21</u>
Total Number	303	151	1	455
Total Per Cent	66.6	33.2	2.2	100.
Grand Total Number	1,449	702	8	2,159
Grand Total Per Cent	67.1	32.5	0.4	100.

Source: 1958 survey of Saudi Arab employees.

data represent only the segment of the population of Tarut Island which this writer labeled as the progressivists. The literacy rate as far as the rest of the population is concerned is undoubtedly more grim, because education in Tarut is regarded as a discipline for children and not for the adults.

There are three high schools on Tarut Island, one located in the town of Darin, a second in Tarut Town, and a third just outside Sanabis to serve the towns of Sanabis and Zor. Each of these schools has approximately 600 pupils and 4 or 5 teachers per school, the number of teachers obviously being much below the standards in more literate areas of the world. This latter point is of especially significant importance when it is realized that these children are isolated socially and physically from the outside world. In other words, these high school students must rely entirely on textbook education since other avenues are either minimal or nonexistent; although it is probably true, of course, that if the father of a particular student is, for example, a progressivist, naturally he will pass some of his experiences on to his son, an avenue that other children will find closed. This is illustrated in Table VIII which shows that, according to the 1958

TABLE VIII

FATHER'S OCCUPATION OF EMPLOYEES FROM QATIF OASIS AND TARUT ISLAND

Father's Occupation	Birthplace																		Total	
	Qatif Oasis														Tarut Island					
	Umm al- Sahik	Safwa	'Awam- miyyah	Al- Qudaih	Sayhat	Qatif	'Anik	Al- Jishsh	Umm al- Hammam	Al-Jaru- diyah	Al-Kha- waladiyah	Al- Tubi	Al- Bahari	Al- Ajam	Other Qatif Oasis	Tarut	Al- Sanabis	Darin		Al-Zor
Shepherd	1	-	-	1	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	16
Cattle owner	4	2	-	-	-	-	17	-	-	-	-	-	-	-	4	1	-	-	-	28
Farmer	28	180	59	45	68	22	15	30	49	25	24	34	18	24	59	68	4	8	2	761
Seaman	3	19	12	5	85	4	13	2	2	-	-	1	2	1	16	75	25	47	8	320
Pearl Merchant	-	-	-	-	4	-	1	-	-	-	-	-	-	-	5	2	-	1	-	13
Boat captain	-	-	-	-	1	-	-	-	-	-	-	-	1	-	2	1	-	-	-	5
Fisherman	-	1	-	-	4	2	-	-	-	-	-	-	-	-	2	6	-	1	-	16
Diver	3	17	11	11	62	3	19	1	5	1	2	-	6	1	10	48	20	27	6	253
Grocer	-	-	-	-	-	1	-	-	-	-	-	-	-	-	3	1	-	-	-	5
Merchant	1	18	16	5	16	17	5	4	1	2	1	3	1	1	56	13	-	8	-	168
Retailer	1	10	11	8	13	10	4	4	1	1	1	1	1	1	31	8	-	6	-	112
Contractor	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	1	4
Imam	1	1	3	-	1	3	-	-	-	-	-	-	-	2	2	3	1	2	-	19
'Umdah	-	1	-	-	2	-	-	-	-	-	1	1	-	-	-	1	-	1	-	7
Government employee	1	3	2	1	2	3	-	-	-	-	1	-	-	1	9	-	-	4	1	28
Mason	-	1	-	1	2	-	-	-	-	-	-	-	-	-	8	3	-	-	-	15
Blacksmith	-	-	-	-	1	-	-	-	-	-	-	-	-	-	6	-	-	-	-	7
Barber	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	3	-	-	-	5
Porter	1	3	1	1	2	1	-	-	-	-	-	-	1	-	3	1	-	-	-	14
Tailor	-	-	2	-	4	4	-	-	-	-	-	-	-	-	11	3	-	-	-	24
Coppersmith	-	-	-	1	2	-	-	-	-	-	-	-	-	-	3	-	-	-	-	6
Butcher	-	-	-	-	2	2	-	1	-	-	-	-	-	-	4	-	-	-	-	9
Carpenter	-	2	-	-	3	3	-	1	-	-	-	-	-	-	6	2	-	1	1	19
Teacher	1	6	1	-	6	-	-	-	-	-	-	3	-	1	2	2	-	1	-	23
Workman	1	16	5	6	22	4	4	2	1	-	-	1	-	1	12	9	2	9	-	95
Other	1	5	3	1	2	1	5	-	2	-	-	-	-	-	20	2	-	-	1	43
Totals	47	285	126	86	306	82	97	45	62	29	30	44	30	33	274	252	52	116	20	2,015

Source: 1958 Survey of Saudi Arab Employees

survey, approximately 35 per cent of the total ARAMCO employees' fathers are farmers, 19 per cent seamen, and 23 per cent divers. These figures are probably closer to the actual facts when the entire Island's labor force is taken into consideration.

VIII. LAND OWNERSHIP

Although land on Tarut Island, as anywhere else, is either privately or publicly owned, the difference is that Tarutis believe that all nonprivate lands are rahmaniyyah, which means a gift of God Who is the Compassionate. The term nonprivate, rather than public--i.e., government-owned land--is used because Tarutis have not accepted the fact that all land is government property and must be purchased if it is to be individually developed. This reasoning has evolved because of the social and physical isolation of Tarut from the Saudi mainland with a consequent lack of effective governmental policies covering land ownership. Through the years, as a result of this isolation, Tarutis have developed the practice of choosing the property they desire and building on it what they please without being obligated to either the central or the provincial governments of the Eastern Province. This is

not out of disrespect for either of these governmental bodies, but is due rather to the vast amount of vacant and unproductive land existing on Tarut.

Of the 725 Tarutis who work for ARAMCO, according to its 1962 employee survey, only 45 have obtained loans from the company to become eligible for the Home Improvement Program, despite the fact that the majority of the inhabitants of Tarut live in homes that are unfit for human occupancy (see Illustration 7). Their houses have reached a maximum level of blight, substandardness and ugliness (this is discussed further in Chapter VI).

Company employees' homes on the Island, scattered at random, are registered with the Qatif Municipality, although the houses of the remaining Islanders are not necessarily so registered. It is partially for this reason that there is an irregular pattern of homes scattered throughout the Island, although another and possibly more cogent reason is that the scatterization is an outgrowth of the strong family unity (discussed earlier in this Chapter) whereby families with blood relationships prefer to live adjoining each other.

Because land in Tarut has no fixed price, it is not unusual to find a Taruti bargaining with municipal officials



Illustration 7.--Comparison between peasant homes: older and less desirable type on right, newer and more modern home on left (refuse and garbage in foreground).

over the cost of a piece of property. The procedure generally takes a specific form. If a Taruti decides to buy a piece of property, he is required to submit a "request to Purchase" from the Qatif Municipality. In performing this operation, he is actually engaging himself in long-term bargaining between himself and other potential buyers from Tarut. This first Taruti may not have an immediate competitor to overbid the price he offered, and frequently his request is filed by municipal officials until someone contests his bid and a satisfactory price is agreed upon with the Municipality. In other words, because this procedure is generally very lengthy, Tarutis in the past have decided to take matters into their own hands. In any case, a Taruti substantiates his action by reasoning that, in essence, since all nonprivate or "uncommitted land" is rahmaniyyah, he should not trouble himself to go to the municipality to obtain what is rightly his. Rather than criticizing the Taruti for developing this line of thinking, the blame should be considered basically that of the municipality for not having formulated policies on the sale of the land. The function and role of the municipality will be discussed in Chapter IV.

IX. SUMMARY

In conclusion, Tarut is an underdeveloped Island. Generally speaking, its inhabitants have not taken advantage of the inherent natural opportunities in the fields of modern technology and education to advance their living standards (for an exception, see Illustration 8). Life on the Island is one of boredom and preoccupation with obtaining the bare necessities of life. Tarut Island is in need of help--socially, economically, technologically, and administratively. This thesis should shed some light on the implementation of governmental, administrative, and planning programs for the Island. It is hoped that this study will be instrumental in guiding the government to an improvement of conditions in this Eastern Province.



Illustration 8.--Privately owned modern
ice-making plant in Tarut Town.

CHAPTER IV

ADMINISTRATIVE AND TRADITIONAL FRAMEWORK OF LOCAL GOVERNMENT IN SAUDI ARABIA

I. BACKGROUND

The governmental administration of Saudi Arabia is organizationally and functionally archaic. Responsible for the internal affairs of the country are the provincial and local governments, the Ministry of Interior, and the Supreme Planning Council. This thesis will endeavor to analyze these agencies in order to justify the recommendations for radical change.

On the provincial level, Saudi Arabia is divided into five broad administrative units: Hijaz, 'Asir, Najd, the Northern Frontier, and the Eastern Province. In each, the provincial capital exercises complete jurisdiction over the persons and the communities within these units. Some provinces, for example the Eastern Province, have an amir or governor while others, such as Najd, have a Municipal Director. In the Eastern Province Amir Sa'ud ibn

Abd Allah ibn Jiluwi has been the provincial governor since his father's death in 1935.

At the local level, most of the cities of Saudi Arabia have formal municipal organizations. An elected council is headed by an appointed Municipal Director who supervises such community services as street paving, waste disposal, the construction of water and sewage systems, and the sale of government land. For many years the Ministry of Interior functioned as the final authority for the internal affairs of the government, operating with the five administrative units for the purpose of maintaining a degree of decentralized and independent form. Most of the municipal governments report ultimately to the Ministry of Interior except in the Eastern Province where, on most matters, the towns report to the provincial government and only on limited matters to the Ministry of Interior. Similarly, the Coast Guard operating in the Red Sea is a part of the Ministry except in the Persian Gulf, as in the case of Tarut Island's Coast Guard, where it is a part of the provincial government.

All of the internal affairs of Saudi Arabia are centralized in the Ministry of Interior, in that all decisions covering major improvements in the five administrative

units of the country must be either wholly or partially approved by the Ministry. According to Abdulla Aquil, Director of Municipal Affairs of the Supreme Planning Council,

. . . much of the overlapping of authority and duplications of functions existing today among these units [administrative] could be circumvented if the Ministry would delegate some of the essential functions to these agencies.¹

As it is, such national problems as police, fire, land purchase, planning, utilities, immigration and naturalization services, and now water and electricity (being nationalized) are the sole responsibility of the Ministry of Interior.

The enormity of these burdensome tasks has lessened the effectiveness of the Ministry in the country's central internal affairs and consequently the Saudi Government, aware of this inefficiency in the governmental services, currently is contemplating changes. For instance, in 1961 the Council of Ministers established the Supreme Planning Council, which is composed of a chairman who is President

¹Personal telephone interview with Mr. Abdulla Aquil, Director of Municipal Affairs in the Supreme Planning Council, November 13, 1963, in Washington, D. C.

of the Council of Ministers or his delegate, and the Ministers of Agriculture, Commerce, Communications, Finance and National Economy, Health, and Petroleum and Mineral Resources. A Secretary-General and his staff carry out the Council's decisions and advisers provide the Council with technical information and recommendations. The Council is empowered to formulate the overall developmental policy of the government and to coordinate the activities of the individual ministries.

The Supreme Planning Council--the only agency involved in the internal affairs of the Government--is organized in form, with well-defined functions and expert personnel to administer the Council's responsibilities. The Ministry of Interior, the municipalities, and the provincial local governments, however, are now challenging the Council as to its role in supervising certain governmental administrative activities such as the construction of roads and the development of the communities. This overlapping of authority has lessened the effectiveness of the Council to function as an independent governmental administrative body.

During the last decade, the internal governmental structure in Saudi Arabia has changed but little. As

present-day demands for local services have brought pressures on the central government, the result, out of desperation, has been the establishment of Saudi governmental agencies such as the Planning Department, the Supreme Planning Council, and the Ministry of Labor and Social Affairs. Some of the civic demands which have been met are: (1) the development of major roads; (2) the nationalization of electricity in order to protect individuals from private monopolistic controls with a consequent reduction in prices; (3) the extension of controls of water pipes to homes; and (4) the development of a sewage system in major parts of the country.

There are, however, many other deficiencies that must be remedied, and these pose the following types of questions: which of the major improvements should be assigned to the Ministry of Interior, the Supreme Planning Council, or the provincial and local governments; what interrelationships should these government agencies have with each other; what appropriate functions should be assigned to each of these agencies. These and other questions must be answered before the organizational form and functional specifications of the governmental administration of Saudi Arabia can be well-defined. As the answers

to the questions are developed, it is to be hoped that this will provide the opportunity for the citizens of the various communities to participate in the affairs of their own local governments. This, in turn, may stimulate popular interest and develop a healthy investigative mind and public awareness of the goals, the pitfalls, and the alternative solutions to achieve community objectives. This is the only approach which holds the important and essential ingredients to any progressive society.

II. MUNICIPAL ORGANIZATION AND FUNCTION

It has been stated that the Eastern Province is one of the five recognized administrative units in Saudi Arabia, and there are three reasons why the Eastern Province is different from the other four. In the first place, while the other four administrative units are headed by a municipal director, the Eastern Province is headed by an amir or governor. In the second place, the Eastern Province is an area (from Jubail to Al-Hafnf and all along Tarut Bay) possessing all of the dynamics conducive to regional planning (see Chapter V). The third factor is that several natural resources--oil, agriculture, and fishing--are so evenly distributed throughout the Eastern

Province that not one of its communities is completely dependent upon another for its existence. These factors are undoubtedly valuable assets in the development of a regional governmental structure in the Eastern Province, and this development is the basic long-term objective of the thesis.

The present municipal administration in this region must be reviewed first. As stated earlier, in 1953 H. H. Amir Sa'ud Ibn Jiluwi moved his residence from Hofuf to Dammam on the Persian Gulf, where the new capital of the Province was established. This was undoubtedly due to the growth of the trading activity in the urban centers of Dammam and Khobar. The move of the capital has certainly affected the local administrative government of the region in that some of its staff functions are still performed in Hofuf while the line functions have been transferred to Dammam. Apart from the administrative complications, there are also business difficulties. For example, F. S. Vidal points out:

Hofuf traders, even though they still keep their residence in the town, transact a good part of their business from the new capital and have

less contact with the purely local aspects of government.²

In other words, the change of location of the capital has complicated the economic activities of the region but, at the same time, it may be a turning point in the governmental setup. This is illustrated by the fact that the head of the governmental administration in the Eastern Province is the governor, with the police and municipal departments under his direct authority and responsibility. At present, the Provincial Police Department has very little responsibility and such limited functions as directing traffic, keeping the peace, and issuing various types of licenses. The Police Department is headed by a Police Commissioner who, together with his assistants, are responsible for the execution of these functions. In addition, the municipality (the baladiyyah) is the only governmental agency responsible for enforcing local governmental functions, which are actually minor and deal with such administrative duties as street cleaning, public construction works, enlargement of streets, and street sprinkling.

²F. S. Vidal, "The Oasis of Al-Hasa," (Arabian American Oil Company, Arabian Research Division, Local Government Relations, 1955), p. 101.

The Qatif Municipality, which is politically and administratively responsible for providing services to all the different communities in Qatif as well as Tarut Island, is probably the least effective governmental agency in the Eastern Province. One of the reasons is that the administrative and economic activities in Qatif are second in importance to those of Hofuf, the previous capital. As a result, additional local governmental departments were created to meet the needs of the community of Hofuf, such as the Taxation Agency, whose representatives collect the customs duties which are assessed and collected by them directly.

Representatives of the custom authority are located at the main gates of access to Hofuf to levy municipal sales taxes on merchandise entering the market. It is also their responsibility to collect the annual rental tax from the people who build sales booths or otherwise display their merchandise in the market area. These sales and rental taxes are called "ardhiyah."³

Another reason for Qatif municipality's ineffectiveness is that Hofuf was the seat of government while Qatif was responsible to a municipality office which was headed by a municipal director, his assistant, a civil engineer, and a surveyor. These officers met daily to

³Ibid., p. 97.

administer the affairs of Qatif and of Tarut Island. Currently some of their other duties are arbitration, adjudication, and rule-making. One of their most important functions is to supervise the sale of government land. In other words, there is no formal administrative hierarchy below the level of municipal director.

III. MUNICIPAL AUTHORITY AND RESPONSIBILITY

As a result of this informal hierarchy in Qatif, the responsibility and authority of public servants tend to reflect a degree of rigidity. Responsibility, in essence, is not well-defined and the authority inherent in the director, although minimal, is actually discretionary. For the few functions retained by the municipality, little authority is actually needed by the director other than that required in the daily routine performance of municipal functions. In other words, although the authority and responsibility to effectuate the performance of municipal services in Qatif has been delegated to the director, his major decisions, in actual practice, must be approved by the governor, to whom he is responsible.

Although the Eastern Province has definitely passed through a revolutionary period of change, the

governmental administration of this sovereign region unfortunately remains relatively the same as it was in the 1930's and 1940's. The movement of the capital from Hofuf to Dammam should stimulate further changes as the development of the new capital encourages further growth in municipal functions.

As for the town itself, Dammam is the eastern terminus of the Saudi Government Railroad; it is the center of commercial activities in the Eastern Province; it is the center of government; and it has one of the major ports in the Eastern Province. Hence, activities such as subdivision of land, development of roads, comprehensive planning programs, and municipal utilities have now become part of the municipal responsibility.

Naturally it may be some time before the feat is duplicated in Qatif, although when the Agricultural Training Center becomes operational in that area, interest in agriculture should grow to such an extent that municipal services will be needed to meet the demands for these activities. For example, the development of major roads and commercial centers for agricultural products and fish catches will be inevitable. In other words, business activities will create pressure for the required municipal

reforms in Qatif, Tarut Island, and the other communities of the Eastern Province. If local industry does not develop, the Qatif Municipality will remain as crippled as it is today.

V. COUNCILS OF ELDERS OF TARUT ISLAND

Due to the ineffectiveness of present local government in the Qatif area, the major communities of Tarut Island have each created a council with authority and responsibility to conduct the affairs of their respective jurisdictions. There are four councils, each representing the religious and political philosophies of their respective community or group of villages: the Councils of Darin, Sarabis, Al-Zor, and Tarut Town, the last representing a group of villages contiguous to Tarut Town. The number of members of each council depends upon the size of the community, the number of traditionalists recognized as leaders of the community, and the number of rich land owners. Despite the fact that members of each council are elected by their respective citizens, and irrespective of the different religious philosophies of each of these communities, the administrative goals are basically the same: accomplishing what the municipality of Qatif has failed to achieve.

Functions

The Councils meet irregularly, depending on the seriousness of an issue that may develop. Their adjudicative functions, in other words, though limited and lacking authority, are very effective. The Council deals, for instance, with activities such as street cleaning, arbitration, formulation of policies dealing with topics such as extending electricity to the Island, improving the standard of living of its community, playing the role of a court of justice for all civil cases, and seeing to it that these functions are carried out.

The Council's effectiveness depends upon the contributions made to its funds. With or without these contributions, certain tasks such as filling holes in the paths or flooding of wells become the responsibility of the entire town. If these tasks were left to the municipality, the job would not be accomplished for a long period of time. There are three reasons for this shortcoming: (1) the municipality itself lacks the financial capability to provide such services to the communities; (2) the municipality does not have the skilled labor to accomplish these tasks and so it generally picks a few peasants from each

particular community and assigns the job to them for a prearranged wage; and (3) the municipality itself turns for help to ARAMCO to provide additional financial assistance to meet present demands for improvements, and ARAMCO obliges because it wants to improve its relations with its employees. In fact, the facts are that more is being done for the Eastern Province by ARAMCO than by the Saudi Arabian government.

Authority and Responsibility

The authority and responsibility of the members of the Councils are reflected primarily in their roles as leaders and arbiters than in the powers bestowed upon them by their communities to perform the functions of adjudication and rule-making. The Council is an extralegal body of traditionalists responsible for carrying out those local functions that the Qatif Municipality has failed to perform. As noted, these include such minor activities as street cleaning, patching holes in paths, and similar maintenance functions. The Councils' responsibilities also extend to such duties as arbitration over civic issues, marriage counseling, and public relations activities. Since the Council's role is extralegal, failure to obey

its orders in the performance of these tasks is not met with punishment of those individuals responsible but rather by public denouncement or social pressure. In Tarut this means dishonor to the family name; disregard means disrespect to the Council; and these bring perpetual loneliness to the individual.

Relationship to the Governmental Administration of Tarut

Although each Council of Elders is an informal body of "elderly" citizens, its relationship to the Qatif Municipality is very formal and cautious, and there is no central Council to represent the entire Island. The contact between each Council of Elders and the Municipality is at the community level, for the purpose of dealing with problems that the community cannot hope to accomplish with the minimum resources available to it. However, since the Municipality also seems to lack the available resources to come to the aid of these communities, their problems are generally referred to the Ministry of Interior. If a problem is one of great importance to a community--for example, the widening of a road or a similar undertaking--it is then referred to the Supreme Planning Council for further

assistance. In other words, a compromise is generally reached among these different levels of government in order to solve a need of a community.

Municipal government in Saudi Arabia is centralized but lacks any autonomy. The irony is that the municipalities are responsible to the Ministry of Interior which itself needs technical guidance. Some of the problems are sent to ARAMCO and a few are fed back to the provincial government in the Eastern Province. Authority and responsibility are not defined, goals are not designated, organizational hierarchy is very informal, and specialization is infinitesimal.

One possible solution to this problem would be to remove the municipalities from the control of the Ministry of Interior, and establish a new Ministry of Local Affairs to direct the activities of the municipalities. The new ministry could be responsible for administrative matters, and its planning functions should be performed in conjunction with the existing and proposed comprehensive plans of the Planning Department of the Supreme Planning Council. The administrative political functions of the Ministry of Local Affairs should be delegated to the various municipalities and the provincial local government as exemplified

by the Eastern Province. These recommendations should solve a portion of the current problem, that is, the rigid interrelationship between the municipality and the Council of Elders.

However, as has been discussed in earlier chapters, the social interaction among Tarutis is minimal. It is therefore recommended that a Council of Representatives be established to consist of five members representing the different communities of the Island. The members of this Council of Representatives would (1) act as liaison officers between their communities and the municipality, (2) act only to balance and check the actions of the municipality, (3) give their consent to major legislation affecting the Island, and (4) be elected biannually, by a vote by the members of each community council to determine their new representatives. This writer acknowledges the fact that participation by these members in the affairs of local government is healthy and rewarding to the citizens of the Island as a whole. In fact, the lack of participation and interaction is precisely what is maintaining the symbol of social isolation. It is to be hoped that such a Council of Representatives would help to relieve some of the social tension existing on the Island.

IV. SUMMARY: INTEGRATION OF GOVERNMENTAL ADMINISTRATION AND TRADITIONAL AUTHORITY

The writer has attempted to analyze the positions of both the governmental administration of Tarut and the traditional authority represented by the Council of Elders. Both bodies are relatively influential: the former has legal authority while the latter has extralegal powers. They are both organizationally and functionally ineffective, with no defined authority or responsibility. Despite this, the Qatif Municipality and the Councils of Elders manage between them to meet part of the numerous demands for services from this rapidly emerging rural society. It is unfortunate that the interrelationships are not cordial, because this is one of the major reasons why Tarut is isolated and its services inadequate, even though its tradition is strong and its hopes are kept alive for betterment of local services and community environment.

The traditional authority of the Council has grown to its present dominance due to diminishing governmental authority and responsibility on the Island. While the Councils traditionally lack the resources and the legal powers to upgrade the performance of services on Tarut

Island, the Qatif Municipality possesses such powers but lacks the defined authority and responsibility to effectuate them. In either case, Tarut's future development--socially, economically, and technologically--remains dependent primarily upon the radical reforms of the local governmental administration in Qatif, and in addition upon a solution to this permanent feud. Integration of this strong traditional council with the Qatif Municipality is essential if harmony and cordial relationships are to develop between the government and the people of Tarut Island.

CHAPTER V

SOCIAL AND ECONOMIC GOALS

From the preceding chapters, one conclusion is pre-eminent: Tarut Island, an integral part of the Eastern Province, requires social and economic reforms. These reforms can also be magnified to reflect the need of the Eastern Province as a whole because, as it has been stated, Tarut Island is a microcosm of this entire region.

I. REGIONAL GOALS

It was difficult in the past to use the term "region" to designate the Eastern Province, since Tarut Island was physically isolated from it. However, with the linkage of Tarut to the mainland by a causeway (see Illustration 1, p. 16), and the resulting easier communication, the area can now be thought of as an integrated region. A very basic need is for a governmental planning agency, to be established in the province in order to give dynamic

direction and guidance to the acceleration of physical growth and development of the provincial communities.

Physiographic Goals

The boundary of the Eastern Province of Saudi Arabia already has been identified, geographically speaking, to include the area encompassing Jubail to Al-Hofuf and all along Tarut Bay. This vast area engulfs the desert oil towns of Ras Tanura, Dhahran, and Abqaiq--towns that have grown to be green areas wherein some of the most modern architecture befitting desert climate may be found. In the meantime, such old desert towns as Qatif and Al-Hofuf exist as marvelous oasis town patterns. In addition, along the Tarut Bay area some of the world's most beautiful palm grove concentrations occur. Some fine beaches also rim Tarut Bay, such as the Half-Moon Bay Beach and the stretch of beach south of Al-Khobar, which possess those intrinsic qualities that recommend them as resort and recreation beaches of special attractiveness.

Therefore, the sphere of planning in the Eastern Province must be enlarged from the sphere of city, street, and block to encompass the sphere of the region. According to Dr. Saba George Shriber:

The Eastern Province of Saudi Arabia may not be as impressive as some other oil-producing areas where the boom-libido is concentrated on one spot. Here the efforts of both ARAMCO and the Government are spread over a large geographic area and, as such, have etched the beginnings of a viable region.¹

In other words, this is an area which has no definite physical boundaries and its geography does not determine the social pattern of the various communities.

Economic Goals

The Eastern Province has in the past been identified as the oil industry region of Saudi Arabia and from this standpoint the region has a realistic future in that it can profitably utilize an expanding population. The oil industry and the agricultural development of the Eastern Province have great potentialities in forming the major economic base of the Tarut Bay region. With the new airport at Dhahran (built by the United States government and given to Saudi Arabia), the new port at Dammam, the new highway recently completed connecting with Riyadh, as well as the railroad, this region has the basic potentialities for balanced development with a diversified economic base.

¹Saba George Shriber, A.I.P. Report on City-Growth in the Eastern Province, Saudi Arabia (Kuwait: n.p., March, 1961), Part IX, 137.

Agriculture. ARAMCO and the Ministry of Agriculture are playing highly important roles in the development of agriculture in the Eastern Province. The proposed Pilot Experimental Training Center in Qatif, and the irrigation and drainage system in Qatif and other areas of the Province (see Figure 2, page 27), are only the beginnings of the dedicated work in this pastoral region. It is recommended, therefore, since agriculture is the primary source of living for the inhabitants (see Figure 3, page 95, and Illustrations 9 and 10), and since there is no department representing the Ministry of Agriculture in the Eastern Province, that a Department of Agriculture be established in this region. This Department should have well-defined responsibilities and delegated authority to perform its regional duties. It should work in close contact with the Department of Agriculture of ARAMCO, and should have a budget provided by the central government sufficient to meet immediate goals. The Department of Agriculture should then conduct studies such as marketing, the most profitable varieties of dates, a soil survey, and a classification of the size and hold of each family farm. In other words, this writer basically is suggesting decentralization of the activities of the central government on

Figure 3.--Chart showing the availability of vegetables in Qatif (including Tarut Island) and in the Hofuf area.

AVAILABILITY OF VEGETABLES QATIF & HOFUF AREAS

COMMODITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
CABBAGE												
CARROTS												
CANTALOUPE												
CAULIFLOWER												
CORN SWEET												
CUCUMBER SHORT												
CUCUMBER LONG *												
EGGPLANT												
GARLIC **												
LETTUCE HEAD												
LETTUCE ROMAINE												
LETTUCE LOOSE HD.												
LIME												
MELON LOCAL												
MELON WATER												
OKRA												
ONION GREEN												
ONION DRY ***												
ONION SEMI DRY												
PARSLEY												
PEPPER HOT												
PUMPKIN LOCAL												
RADISH												
SQUASH GOURD												
SQUASH ZUCCHINI												
TOMATOES												
TURNIPS												

* ONLY LOCAL AUG - SEP
 ** AVAILABLE FROM STORAGE MARCH - APRIL
 *** " " " AUG - MAY

JAN. 1, 1962



Illustration 9.--Two traditionalist land owners and an ARAMCO agricultural specialist with part of a crop of hybrid onions--Tarut Island.



Illustration 10.--A cantaloupe grown
as part of the Agricultural Development
Project.

a regional basis.

Fishing. The potential development of a fishing industry in the Eastern Province is as essential to the economic growth of the region as is the development of agriculture. However, there are some difficulties in assigning priorities to its development because of projected or accomplished objectives in neighboring communities. For example, according to ARAMCO there are plenty of fish and shrimp in the Jabail area and development of other areas is unwarranted; a cold storage plant already exists in the Dammam-Al-Khobar area; and Khalifa Al-Gossabaibi intends to build a fish and shrimp processing and freezing plant of three tons-per-day capacity in Dammam.

The foregoing developments have or will take place in the Dammam-Al-Khobar area, but nothing is being done or proposed in terms of an organized development of the fish and shrimp industry in other appropriate parts of the region such as Tarut Island. Because there is no statistical information on the potential catches in these areas, several studies should be conducted to ascertain the actual size of this resource.

To coordinate the activities of private enterprise,

a Department of Fisheries should be established. The catching and selling of shrimp and fish should be organized and should be competitive, which would invalidate the fishing concession granted to Al-Gossabaibi for all the waters in the Persian Gulf. Competitors should abide by the rules and regulations to be drawn by the Department, with standards adequate to meet the region's output. Naturally, it is expected that the Department of Fisheries would conduct several studies, including one on the quality and quantity of fish and shrimp in the entire region and another on the feasibility of establishing freezing and processing plants. It is hoped that such studies may provide the statistical information necessary to determine the practical aspects and the justification for such an industry in this Eastern Region.

Pearl diving. The proposed Department of Fisheries should be responsible also for the pearling activities in the region and should be assigned the responsibility for determining the feasibility and justification for the potential role of this ancient industry in the economic development of the region. It is also important that a study should be undertaken to determine the effect of the

recent influx of people from Oman and Southern Arabia on the future growth of this industry.

A Department of Finance should be established to revise the present archaic tax structure, especially the galatah (the tax amounting to one extra diver's share). The Ministry of Finance should establish this department in the Eastern Province to levy and collect taxes such as sales, custom, and property.

Through the various studies and major surveys to be conducted, these proposed departments--Planning, Agriculture, Fisheries, and Revenue--should be able to give this region an economic identity in terms of large-scale production. The lack of vital statistics and basic planning data stand as major impediments to any comprehensive course of action in local or regional growth. Therefore, any detailed economic development of the Eastern Province will depend almost entirely on the findings of these departments.

Social Goals

Probably the most difficult task in this thesis is to predict, in terms of time, the social organizational goals of the Eastern Region. As discussed in Chapter III,

the social organization of Tarut Island--that is, the group of Sunni and Shi'ite communities with similar cultural backgrounds--furnishes a microscopic view of the social forces of the entire province. Since all of these communities share a lack of social cohesiveness, there is need of integration in the Eastern Province in order that an "open" social structure may evolve.

The problem is not that the people do not want to be socially integrated; it is rather that the inhabitants of this region are embedded in custom, tradition, and religious beliefs which have tended to dominate the social behavior of the inhabitants to such an extent that in most cases they have become impediments to their social and economic progress. It must also be pointed out that since there are no external forces (other than ARAMCO) to influence or aid in the adjustment, the social goals of the region become more difficult to identify. For example, the point has already been made that Tarut is a relatively immobile community, with a rate of migration to the Eastern Province so negligible that it is unlikely to affect the present trend of population growth or the technological advancement of the region.

The point, therefore, is that with all these

factors existing, the social goals of the region must depend on the development of a local industry. The interaction of workers on a farm or in a fishing plant could break this social barrier as it has for the ARAMCO employees who are regarded by their friends and others as social reformers or "progressivists." The ARAMCO employee is attempting to break the social barrier--but not his religious ties. It is this latter force that has kept the Eastern Province unified over the centuries and which will undoubtedly be one of the major factors influencing its future planning and its social and economic development.

II. THE ADMINISTRATIVE GOALS

The municipal and provincial administrative governmental units in Saudi Arabia are directly controlled by the Ministry of Interior. Despite this centralization, functions overlap, authority and responsibility frequently are duplicated, and consequently time is wasted. Municipal services are quite inadequate and community demands for improvement are increasing daily.

With the potential development of the Eastern Province, a Provincial Government should be established to meet the services required in social and economic develop-

ment. It should be comprised of the following: His Royal Highness as Governor; a Council composed of Directors of Planning, Agriculture, Fisheries, Education, Recreation, Finance, Water and Power, Health, Fire, and Police (headed by a chief). A Council of Elders for Tarut Island acts as an advisory body to the Council of Directors on problems and issues affecting the Island of Tarut. Schematic charts of the existing and proposed regional governments in the Eastern Province may be found in the Appendix.

The first items on this government's agenda should be the conduction of the studies recommended above for most of the Departments. The results of the findings should determine the justification and the economic feasibility of establishing these departments on either a permanent or temporary basis, as the case might be. For example, if the studies showed that the quality and quantity of fish and shrimp in the Tarut Bay Area is too negligible to warrant a large-scale operation, then a smaller unit of government should be established in place of a Department of Fisheries, with appropriate functions assigned to it. The same procedure should apply also to all of the recommended departments because, to assign functions at this stage, would be to act prematurely and violate a principle of

planning which states that planning must be based on evidence of findings.

In relation to the central government, the provincial government of the Eastern Province must have local autonomy, sufficient powers to meet the increasing needs for regional services, legal power to levy and collect taxes, and the power to appoint local officials to head the departments. Relations with the central government must be cordial but both should be independent from each other in their respective fields. It should be remembered that the central government will be encouraging this regional development and will have confirmed its approval by investing money, manpower, and support to bring about a plan of this magnitude which should pay off in the long run.

The provincial government of the Eastern Province should reside in the capital city of Dammam for the following reasons: first, Dammam is one of the major urban centers; second, it is the major commercial center in the Province and has a fine port and the railroad² which links

²Arabian American Oil Company, Arabian Affairs Division, Handbook (Dhahran: Arabian American Oil Company, 1960), p. 76: "Built by ARAMCO for the Government's account, the line stretches 357 miles inland to Riyadh from

it with the capital of Saudi Arabia, Riyadh; and third, Dammam has already established itself as the seat of government.

The provincial government should, in turn, decentralize due to the vast distances separating the communities of the region. Eventually, two municipalities should emerge, with revised functions and adequate responsibilities and authority at the local level. The two municipalities should be located precisely where they are today-- in Hofuf and Qatif.

As far as Tarut is concerned, a representative Council of Elders should be established with two basic responsibilities: (1) it should work in conjunction with the Qatif Municipality regarding issues and major improvement projects affecting Tarut, and (2) it should act as an advisory body to the Council of Directors when major administrative, economic, and social policy decisions will affect the Island. The basic purpose of the Council of Elders is to bring about social integration between the Sunnis and Shi'ites on the Island.

a new deep-water port at Dammam on the Persian Gulf. The cost of construction including port facilities was approximately \$79,000,000."

Hofuf is another community with a Sunni-Shi'ite population, but due to its large size it is qualified to become a municipality. Also, for centuries Hofuf was the capital of the Eastern Province.

The municipalities, in addition to the social integration issues and the general economic development of the community, should establish new functions adequately to solve such problems and meet such deficiencies as water distribution, electricity, drainage, sewage, a system of land ownership, street lighting, and resource development. These major problems are in urgent need of solution and answers should be developed individually, totally, or in combination in phases and in the order presented. The municipality's relationship to the provincial government should be designed to create a coherent environment between the socially disintegrated communities like Tarut and the rest of the Province. This relationship at present is passive and withdrawn and has been absent throughout the history of this culturally diversified province. The municipality should also have a well-defined working relationship with the provincial government over matters of policy and major legislation (including budget, appointments, and dismissals) affecting this decentralized government.

In conclusion, much criticism has been directed in this thesis toward the ineffective governmental administrations of Saudi Arabia, and particularly those of Tarut and the Eastern Province. The criticism was not only directed at the form of government but also at those who administer the functions of the municipalities. To criticize constructively one and not the other would be to evade the truth and would also be a repudiation of one of the basic principles of public administration. Alexander Pope was quoted as having stated: "For forms of Government let fools contest, Whate'er is best administer'd is best."³ The Eastern Province cannot afford to make mistakes in its initial regional development if it hopes to achieve this formidable goal.

³Charles M. Kneir and Guy Fox, Reading in Municipal Government and Administration (New York: Rinehart and Company, Inc., 1958), p. 271.

CHAPTER VI

LAND USE: A CASE PROBLEM

I. PRESENT CONCEPT OF PLANNING IN THE EASTERN REGION OF SAUDI ARABIA

The saying that "history repeats itself" is probably evident as far as the eastern region of Saudi Arabia is concerned. As discussed earlier, this region enjoyed a position of importance during an earlier period of history when principal trade routes from Asia to Egypt and North Africa crossed through the region. In addition to its flourishing pearling industry, its prestige was enhanced by the fact that Al-Hasa and Qatif dates were in demand. Bypassed as a result of changing transportation patterns and affected by a substantial reduction in demand for its few products, eastern Arabia gradually declined in population and activity to a "semi-dormant marginal existence."¹

¹Saba George Shriber, A.I.P. Report on City-Growth

The decline remained through the years until the discovery of oil in Al-Hasa in 1938, when drastic changes took place in this part of the Arabian Peninsula.

The expansion and growth of the oil industry occurred in areas somewhat distant from the existing communities in the Eastern Province. Since these existing communities were not close enough to the expanding new industry, they were unable to benefit economically through providing houses and related facilities for the influx of workers attracted by this industrial development. On the other hand, the Arabian American Oil Company, out of desperation, found it necessary to enlarge the original field camps into artificial, industrial, satellite towns

. . . with provision for staff quarters, bachelor dormitories, dining halls, recreation facilities, work shops and related facilities, work shops to accommodate some 22,000 employees of all nationalities by year-end 1952.²

Thus, the older communities, such as Tarut Island, were by-passed economically and socially by this industrial growth.

Growth in the Eastern Province, Saudi Arabia (Kuwait: n.p., March, 1961), Part IX, 137.

²Ibid., p. 138.

It is unfortunate that the rapid development of these new communities could not have been planned and controlled at their initial period of growth. For instance, in the two new urban centers--Dammam (the capital of the Eastern Province) and Al-Khobar--growth was haphazard. As people moved in, they took over any empty land available and erected basic shelters and fences of locally-available material, separated from each other by narrow irregular footpaths. Today land ownership can not be ascertained, since there has been neither registration of property nor land tenure, and it is impossible to determine who owns the land or how much is owned.

A program of land ownership and subdivision of property is essential not only in Dammam but throughout the Eastern Province. This is one of the long term objectives of this thesis.

As has been pointed out, two distinct types of communities exist today in the Eastern Province: (1) the new urban centers and (2) the old towns and villages which remain unaffected by the industrial growth of the region. The writer will present in the following pages a land use case study of a problem area in the Eastern Province: Tarut Island.

II. EXISTING LAND USE ON TARUT ISLAND

Residential Land-use Pattern

The existing land-use pattern on Tarut Island is rather primitive from the point of view of modern planning, with no identifiable patterns of development to give character to the individual land-use elements on the Island. Tarutis are free to select any piece of property they desire and to erect shelters and other facilities such as small corner stores to serve their basic needs. Consequently, no character exists in the conglomeration of residential units and other physical structures which make up the community of Tarut. The surprising factor is that even company employees who have been labeled as progressivists are part of this complex land-use pattern which, in essence, reflects the unique customs and, more importantly, the social development of this area.

It is difficult to achieve comprehensive planning reforms, such as land subdivision, set-backs, and similar planning techniques, because Tarutis have adapted themselves to living freely without any form of restrictions. In addition, Tarutis believe, from a religious point of view, that all nonprivate land is rahmaniyyah. Naturally, this

present residential pattern will have to undergo changes in the future in order to raise the standard of living on the Island. Since most of the houses are blighted, the central government should be able to devise a rehabilitation program for Tarut Island whereby old, substandard houses, would be either demolished or repaired. In their place, the government should provide Tarutis with subsidized houses similar to those of the ARAMCO employees who qualify under the Home Improvement Program (see Illustrations 11 and 12).

Commercial land-use

There is only one market, or very loosely speaking a community shopping center, and it is located in Tarut Town. The following facilities comprise this center: one gas station, grocery stores, tailor shops, and other small shops to fill the needs of the citizens of Tarut. There are, however, other small corner shops in each village on the Island which carry the immediate necessities of a household, such as sugar, candies, tea, canned foods, and other similar items. The major shopping center, where most of the buying and selling takes place for all Tarutis,



Illustration 11.--New housing for ARAMCO employees.



Illustration 12.--The ultramodern
home of a progressivist in Tarut Town.

is in the Town of Qatif (see Illustration 13). Tarutis generally take their agricultural products and daily fish catches to the Khamis (Thursday) market to be sold at prices higher than they would bring on the Island (see Illustration 14). There are actually simple explanations of the reason for the transportation of goods to the Qatif market: first, Tarutis are poor people and consequently the market competition activities tend to be minimal; second, for centuries Qatif has been a commercial center for most of the people in the Eastern Province; and third, there is a disequilibrium between supply and demand, and the supply of goods far exceeds the demand for them.

It was difficult in the past to transport goods on donkey backs or in garries from Tarut to Qatif--a distance of two and a half miles at low tide. This has changed since 1961 when the central government financed the construction of the causeway connecting the mainland with Tarut, and this causeway is now being used by Tarutis to transport goods to Qatif and to other parts of the Eastern Province. In addition to breaking the physical barrier which had isolated Tarut Island for centuries, the causeway will probably help to break the social barriers which have been an immediate cause for Tarut's "closed" social



Illustration 13.--The Khamis (Thursday) market in Qatif.



Illustration 14.--The market place in Qatif. A Taruti woman in typical heavy veiling carrying produce to her husband's shop.

structure. In the future Tarut may be thought of and integrated with the region as an agricultural, recreational, commercial, or even as a residential community.

Agricultural Land-use

Agriculture as a resource has already been discussed in Chapter II. Therefore, for our present purposes, it will be discussed only insofar as it may affect the land-use pattern of Tarut Island. The quality and quantity of agricultural lands on Tarut Island are rather insignificant compared with the total agricultural acreage of the Eastern Province and they are minimal in comparison to the great concentration of date palm trees on the Island. However, unimportant as this acreage may seem, Tarut alone supplies all the ARAMCO camps with their daily vegetable requirements. This is in addition to meeting the demands of the Tarut families and the market requirements of Qatif.

It is unfortunate that neither a market nor a land-use study has ever been prepared for this Island in order to identify the productive agricultural acreages and the various means for improving the quality and quantity of the agricultural yield.

In Chapter II the writer proposed several remedial

changes in Tarut to be brought about in conjunction with the pilot experimental and demonstration farm and Agricultural Training Center. It is to be hoped that this training Center will encourage a greater number of Tarutis to specialize in farming in order to replace some of the absentee farmers who are coordinating the agricultural activity of the Island.

III. OTHER LAND-USE ELEMENTS

Thoroughfares

The only major street on Tarut Island is the causeway which runs two or three hundred yards onto the Island. Otherwise there are only footpaths which evolved as a result of the continuous movements of garries and other types of vehicles. After years of use, these footpaths are recognized and accepted by Tarutis as the major thoroughfares of the Island (see Illustration 15). These footpaths are generally meandering and very narrow, averaging about ten feet in width.

With the development of the causeway, the traffic of automobiles and trucks to and from the Island has accelerated, causing a traffic problem in the Town of Tarut. It is feared, therefore, that unless the street system is



Illustration 15.--A major Tarut Island road through a mixed residential-commercial district.

upgraded, this causeway will do more harm than good in terms of traffic movement and safety of children on the Island.

Some engineering difficulties undoubtedly will be encountered in the development of roads on the Island due to the meanderings of the paths through concentrated date palms, Sabakhah, and mushy sand. For instance, the area near Darin is low, topographically speaking, and at high tide the sea covers the entire path making access to the village of Darin difficult. According to the writer's analysis of these paths, although they are entirely unpaved and rather meandering in certain locations, their natural or accidental development has taken a peripheral form. This will undoubtedly simplify the burden of development, at least from a financial point of view.

Utilities

Drainage. Due to the topographical formation of Tarut Island, which slopes in an easterly direction, and, as a result of its lack of a drainage system, excess water from farms frequently floods the paths. These floods aggravate the system of communication between villages and create additional problems for Qatif Municipality.

Sewers. Gravity sewers directly to the sea are the only kind existing on the Island. It is true that sewage from some of the houses is handled by cesspits and septic tanks. In general, however, there has been no proper consideration of water source pollution on the Island.

Water. As mentioned earlier, water from rainfall collects in underground strata and can be utilized by means of wells. Hence, as a result of this process, fresh artesian water is trapped under a cover of impervious rock at various places in the Persian Gulf region. When the rock is penetrated by drilling or digging, water rises in the hole and in many instances flows to the surface (see Illustration 16).

The people on Tarut Island get their water from a formation called "Middleocene," or to use the geologic term given by ARAMCO, "the Khobar limestone." On the Island of Tarut, limestone is extremely porous and therefore a good source of water. "The depth of the Khobar limestone in Tarut," according to Maurice Kelley, ARAMCO geologist, "is between 550-590 feet."³

³Interview with Maurice Kelley, Head of the Department of Geology, in charge of water resources in Eastern Province at Dhahran, Saudi Arabia, July, 1962.



Illustration 16.--Artesian well furnishes water for this small reservoir which is then released through drainage ditches to farm lands.

In Tarut, as elsewhere in the Eastern Province at the present time, permission to drill a well must be obtained by an application to the local officer of the Ministry of Agriculture. Drilled by local contractors who operate cable tool rigs or "spudders," the general pattern is to dig to an average depth of 550 feet. Although most of the wells in Tarut are privately owned, municipally owned wells include one for the hospital, another in each of the villages of Zor and Darin, and two in the town of Tarut.

There is also another source of water supply in Tarut and that is from the 'ain, a hand-dug well with a natural flow. The 'ain water is from the Miocene aquifer and seldom exceeds 60 feet in depth. In the town of Tarut under the old fort, there is such an 'ain which flows through a ditch into the commercial center of the town and is then distributed into farm lands throughout the Island, where it serves as the primary source of irrigation for date palm trees (see Illustration 17). Tarutis assemble in great numbers to wash their donkeys, their pots and pans (see Illustration 18), clothes, themselves, and in some cases for drinking this same water that gathers in the commercial center of Tarut Town. This is truly a problem

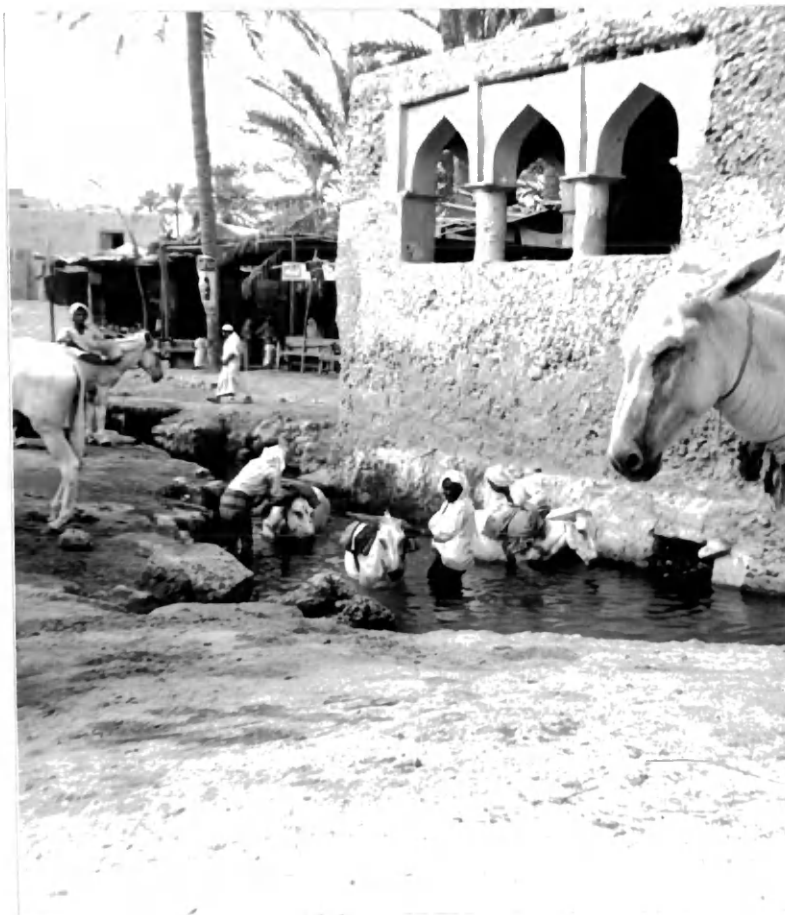


Illustration 17.--Water from 'ain
(spring) flows through drainage ditches
to irrigate the date palms.



Illustration 18.--Taruti woman
washes pan in drainage ditch carrying
spring water.

and it is both unfortunate and surprising that the Ministry of Health is doing nothing about it because, according to Dr. Mohammad Dabbanny, chief of the hospital administration and one of the three doctors in Tarut Hospital:

Some of the major diseases that directly result from contact with water are: infectious hepatitis, intestinal worm diseases, bacillary dysentery, paratyphoid, malaria (indirectly), "pink eye" diseases (conjunctivitis), and diarrhea in new born babies.⁴

These diseases are capable of crippling the hopes, the future progress, and the aspirations of a large segment of the population. For one thing, Tarutis' health is affected by these diseases and, secondly, from a sanitary point of view, the agricultural products of the Island will also be affected since the same 'ain water is distributed to farm lands to water the plants.

According to Maurice Kelley:

The situation on Tarut Island regarding overproduction of water is so alarming that the Ministry of Agriculture should step in with a conservation program that should consist of withdrawal of a few wells and an integration of a water distribution system, instead of the present arrangement

⁴ Interview with Doctor Mohammad Dabbanny, chief hospital administrator on Tarut Island, in Tarut, July, 1962.

whereby small farmers and landowners have their own wells and utilize the water extravagantly.⁵

There is a great quantity of water on the Island, but if such a conservation program were to be undertaken, the overall benefits would naturally be greater than they are at present. For instance, a great number of the closely-spaced wells on small parcels of land would probably be abandoned, thereby protecting the aquifers and terminating specific waste of water. With more efficient utilization of water, the cultivated land would benefit by the absence of the flooding which occurs in most cultivated areas, developing swampy conditions that result in a deterioration of the land by the concentration of alkali near the surface.

The existing 'ain is flowing by natural means, but a study should be made to ascertain its capacity of water. In this way, precise information regarding its capacity and rate of flow would be obtained.

Electricity

Today only a few families on the Island have

⁵Interview with Kelley, loc. cit.

electricity in their homes, but ARAMCO has offered to give technical assistance to any private company representing the needs of the entire Island. As of yet, the various factions in Tarut have not been able to resolve their differences in order to agree on a satisfactory corporate company.

Transportation

Public transportation on Tarut, internally and externally, is almost nonexistent, with taxis and garries--both of which are privately owned--the only types of transportation available. These latter types of transportation are confronted with various obstacles such as bad roads and, in some cases, crossing of the Sabkhah where no roads actually exist, such as the area adjacent to Darin.

The extent to which Tarutis use the bus provided by ARAMCO to transport its employees to and from the Island is illustrated in Table IX. It will be noted that four employees did not commute regularly to Tarut from their place of work. No reasons were given in explanation, but it is believed that these were irregular commuters.

TABLE IX
 FREQUENCY OF COMMUTING OF TARUT ISLAND EMPLOYEES
 OF ARAMCO--1961

Frequency of Commuting	Employees with families living on Tarut Island
Daily	8
Weekly	513
Monthly	27
None (less than once a month)	<u>4</u>
Total	552

Source: 1961 Survey of Saudi Arab Employees
 (Dhahran: Arabian American Oil Company, Arab Development
 Department).

Communication

The lack of a communication system on Tarut Island has already been discussed. Suffice it to say here, a telephone system should be installed so that business may be accelerated, and emergency needs for hospital services and other types of necessities will be handled more quickly.

Postal services and telegrams, not only on Tarut Island but in the entire Eastern Province, should become daily services. Tarut's only post office is in Darin and therefore the difficulties that Tarutis have in communicating with each other on the Island or with others on the mainland may be better understood. This is another one of the reasons why Tarut Island has been physically and socially divorced from the Saudi Arabian Peninsula for so many years.

Public Facilities

Fire stations. When a community is not provided with a fire station for protection against fire, it becomes either an inhuman evasion or a neglect of their responsibilities by those authorities who have accepted the

obligation to serve and protect the public of that community. But when those authorities--meaning, here, the Qatif Municipality--become aware that the community they are serving or protecting against fire hazards is one with a physical composition of trees and similar combustible materials, then the irresponsibility becomes criminal negligence.

In July, 1962, in the village of Sanabis, a small fire started that could have been extinguished immediately with only a small amount of expense to the community, and indirectly to the Municipality. However, this was not the case. That fire burned thirty dwelling units. The occupants were rushed out of their living quarters by neighbors and they, together with the rest of the helping hands, ran to the nearest well to bring water in buckets to control and extinguish the fire. The scene of the fire remains today--a symbol of municipal irresponsibility and of human tolerance on the part of the Tarutis.

Schools. Admittedly, three schools are not enough for a large community, but this is the number that exist on Tarut Island. With approximately 600 high school students in each school and an average of five teachers in

each school, the educational expectation is rather unpromising.⁶ However, since this deficiency in educational institutions is shared by most communities in the country. Tarut may have to be satisfied with these minimal provisions.

Hospital. A hospital was built on Tarut Island in 1958-1959. Although not large--having a 24-bed capacity--this relatively modern building is adequate to meet the Tarutis' urgent needs (see Illustration 19). Its normal staff consists of two or three doctors, but these men act as both doctor and nurse, inasmuch as no nurses are employed. Unfortunately, at present the hospital has no ambulance.

Playgrounds. The fact that playgrounds are not only unprovided for on Tarut Island but also in most of Saudi Arabia is unfortunate, because neighborhood parks are badly needed in the residential areas. A new generation of children is growing up, knowing only the streets or the mountains of garbage next to their homes as playgrounds. Mothers are beginning to realize the dangers that their

⁶See also supra, page 64.



Illustration 19.--Modern hospital
building in Tarut, built in 1958-1959.

children are facing when they hear the honking of horns and shrieking of brakes. The people of Tarut are seafaring people, but this should not encourage a calloused disregard of public amenities and services in the neighborhoods to such an alarming extent.

Civic center. It has been stated that Tarut Island falls under the immediate jurisdiction of Qatif Municipality and that the local representative of the Municipality has, as his basic responsibility, street cleaning, mainly in the market area of the town.

Mr. Abdullah Tefaif, acting representative of the Qatif Municipality in Tarut Town, told this writer:

Other communities have refused to be helped by the Municipality. They would rather be left alone and continue to take care of their communities without being responsible to the Municipality for their actions.⁶

This writer wholeheartedly agrees with the Tarutis because the Municipality, as mentioned in Chapter IV, lacks the administrative responsibility, the delegated power, and the financial capability to bring about the radical changes which are long overdue.

⁶Personal interview with Mr. Abdullah Tefaif in Tarut Town, 1962.

Customs Department and Coast Guard posts. The Customs Department in Tarut Island is located in Darin. Its function is to check all imported and exported items that pass through the Port of Darin in case it is necessary to levy a customs tax.

There are two Coast Guard stations, one in Darin and another where the end of the causeway enters Tarut Island. Their basic function is to check and prevent possible smuggling to or from the Island.

Cemeteries and mosques. Sunnis and Shi'ites prefer to keep their cemeteries separate, but not so with mosques. One cemetery of the several on the Island is located at the end of the causeway, giving this historic community an additional sorrowful tone--additional, because one should feel proud of the way these people have accepted the harshness of life without any antagonism (see Illustration 20).

Summary

There is an air of extreme tolerance in Tarut Island. Tarutis are humble people and they have turned the other cheek, so to speak, so very often; they have shown a great patience to those extreme and inhuman living



Illustration 20.--Cemetery for Shi'ites
outside Tarut Town. Note the absence of
identification, ornamentation, or flowers in
this centuries-old cemetery.

conditions. Many things should be done quickly, without further delay, to compensate these people for their endurance and perseverance.

CHAPTER VII

FINDINGS AND CONCLUSIONS

It is essential that a summarization of the findings be attempted so that definite conclusions can be drawn. First, Tarut has an area of approximately six square miles and is two and one-half miles off the Qatif shore in the Persian Gulf. Second, it has been ascertained that Tarut's resources--agriculture, fishing, and pearling--are only subsistence but, as many of the resources in the Eastern Province, they have great potentialities for development. Third, the municipality has no authority nor the financial capability to meet the demands for services--a dilemma found throughout the Eastern Province. The latter may be illustrated by the 1962-1963 budget of 8,000,000 riyals (approximately \$1,770,000).¹ Fourth is the fact that Tarut is a socially disintegrated community.

¹Albilad (daily newspaper), November 28, 1962, No. 1167 of the 4th year of its publication under this title (previous title Albilad Al Saudiyah, published in the city of Jeddah, Saudi Arabia), p. 3.

The proposed regional plan for the Eastern Province, which is the basic objective of this thesis, has several underlying factors: (1) the ineffectiveness of municipal administration; (2) the present overcentralization of local government responsibilities in the central government, whereby most of the major decisions affecting the local governments must be approved by the Ministry of Interior; and (3) Tarut--in all its administrative, economic, social, and planning requirements--is a microcosm of the Eastern Province. By focusing attention on this small area, a better approach to a bigger but similar problem area can be developed with minimum difficulties. These larger regional problems are, hopefully, a responsibility of the central government, which is the level at which solutions must be sought.

Incorporated into a regional plan for the Eastern Province, the writer's proposal is dependent upon various studies and surveys, the outcome of which should determine the economic feasibility, the justification, and the effectiveness of the plan. The proposed studies and surveys are enumerated as follows:

1. Fishing and pearling
 - a. To determine both the quality and quantity of fish in the Persian Gulf and the Tarut Bay areas, and the probability of revitalizing the regional pearling industry.
2. Agriculture
 - a. To determine the variety of dates already existing in the region, together with the amount of yield and the quality of each variety.
 - b. To conduct a soil survey in order to determine the classes of existing soil.
 - c. To classify the size of the holding of each farm family, to provide some means of support for those families in Tarut who depend on this type of work for their living.
 - d. To determine, through a marketing survey, the potential market for the products of the Eastern Province.
 - e. To design a program, whereby the Eastern Province as a whole may benefit from the potential establishment of the Pilot

Experimental and Demonstration Farm and
Agricultural Training Center in Qatif
Oasis.

- f. To provide a conservation program that
should consist of a few wells being with-
drawn, and an integration of a water dis-
tribution system.

In brief, it is essential that the future develop-
ment of the existing resources be encouraged so that the
eastern province will not be dependent upon the oil indus-
try as its primary economic base.

Hence, assuming that the outcome of these surveys
and studies is encouraging, then a revised provincial
government should be set up in the capital city of Dammam.
The head of this regional government should be assisted in
his administrative and legislative duties by a Council of
Directors, each director heading one of the following
departments: Agriculture, Planning, Fisheries, Education,
Recreation, Finance, Water and Power, Health, Fire, and
Police. (A schematic chart of the proposed regional govern-
ment in the Eastern Province may be found in the Appendix.)
To do justice to the many socially disintegrated communi-
ties (communities with Sunni and Shi'ite populations such

as Tarut and Hofuf), a Council of Elders should represent a community in regional governmental conferences, but only when the subject under discussion affects the communities directly. Municipalities should continue to serve their communities, although their functions must be upgraded and more authority and responsibility must be delegated to them.

In other words, this plan is basically one of decentralizing governmental authority and responsibility and delegating them to those divisions of the Kingdom where they can be handled more efficiently. Secondly, it is a plan of integrating the resources of the entire region, whereby the Eastern Province and, hopefully, the entire country will benefit economically from long-range development of regional resources. Third, the regional plan will undoubtedly be the first one of its kind in Saudi Arabia, if not the entire Middle East, and its effectiveness will be watched and analyzed, perhaps with a view to utilizing the concepts as a basis for reorganization in other areas.

Saudi Arabia, in all its regions, cannot afford to misplan or plan as extravagantly as it has in the past. It is essential that surveys and studies of the type and comprehensiveness of those suggested in this paper be

undertaken first. It is then essential that plans be developed thoroughly on paper and be discussed by all the various departments and officials concerned. Planning not based on social, economic, or even physical dynamics is not only no longer condonable, but is against the long-range interests and well-being of the people. Only after extensive preparation should the plans suggested and analyzed herein be implemented.

B I B L I O G R A P H Y

BIBLIOGRAPHY

A. BOOKS

Committee of the Royal Anthropological Institute of Great Britain and Ireland. Notes and Queries on Anthropology. 6th ed. London: Routledge and Kegan Paul, Ltd., 1949.

Encyclopedia Americana. New York: Americana Corp., 1957.

Encyclopedia of Islam. Edited by M. Th. Houtsom, T. W. Arnold, R. Basset, and R. Hatmann. Published by Leyden Late and E. J. Brill, Ltd. London: Luzac & Co., 1913.

Firey, Walter. Man, Mind and Land, A Theory of Resource Use. Glencoe, Ill.: The Free Press, 1960.

Kneir, Charles M., and Guy Fox. Readings in Municipal Government and Administration. New York: Rinehart and Company, Inc., 1958.

Lands and Peoples. New York: The Grolier Society, 1957.

Miles, S. B. (Col.). Countries and Tribes of the Persian Gulf. 2 vols. London: Harrison and Sons, Ltd., (n.d.).

Raphael, Pati. Sex and Family in the Bible and the Middle East. New York: Doubleday, 1959.

Riggs, F. W. The Ecology of Public Administration. New Delhi: Asia Publishing House, 1951.

Shriber, Saba George. A. I. P. Report on City-Growth in the Eastern Province, Saudi Arabia. Kuwait: n.p., March, 1961.

Theodorson, George A. Studies in Human Ecology. Evanston, Ill.: Row, Peterson and Company, 1961.

Warner, Lloyd W. Working Outline for the Study of an Iraqi Village. Dhahran: Arabian American Oil Company, 1947.

B. GOVERNMENT PUBLICATIONS

Associated Consulting Engineers. Preliminary Engineering Study for a Basic Water Supply System for the Damman Municipal Area. Report No. SC 5901/Tol. October, 1960.

_____. Preliminary Engineering Study for a Water Supply System in Al-Khobar Municipal Area. Report No. 5 585/Tol. October, 1960.

These two studies deal with the design of a basic water system for the cities of Damman and Khobar. They begin with an estimate of the present and future populations, possible concentrations of population, and contain a discussion on the reliable sources of water supply and the required per capita consumption. In Al-Khobar an analysis is made of the hourly water demand variation and the required storage capacities as well as the necessary pumping rates.

The basic interest in these two reports is that they represent studies made of the two leading communities of the Eastern Province of Saudi Arabia, whose most important need --as is true elsewhere in the Province--is the development of a water control and distribution system.

These two reports have been instrumental in accomplishing their objectives long since.

Government of Saudi Arabia. "Establishment of a Pilot Experimental and Demonstration Farm and Agricultural Training Center"(request for U.N. Special Assistance towards Executing the Project). Dhahran, October, 1961 (mimeographed).

This report on the intention of the Saudi Government to establish a pilot experimental and demonstration farm and agricultural training center at the Qatif Oasis of the Eastern Province requests the United Nations Special Assistance funds for this project. Saudi Arabia is largely pastoral and agricultural subsistence economy, outside of the oil sector and a small modern sector based primarily upon imports and distributive trades and services. The report paves the road for the improvement of agricultural facilities in the Eastern Province.

. "Report of the Committee of German Experts on the Potential Growth of Saudi Arabia." Dhahran, February 27 to March 28, 1955.

This committee visited Saudi Arabia for the purposes of making certain studies relative to the potential economic growth of the country and came up with the following detailed conclusions:

1. Report on the exploration of highway alignment.
2. Road construction in the kingdom.
3. The Saudi Arabian Railways.
4. Possibilities of improving water resources.

Each of the topics was discussed in detail, with accompanying charts and graphs to illustrate alternative solutions to solve problems of topography, climate, and geographic locations. Most of the discussion refers to actual proposals for future development in Saudi Arabia.

, Ministry of Health. "Report of Malaria Survey Conducted by the Ministry of Health, Tarut Island." Dhahran, 1961 (mimeographed).

This report was prepared by the Ministry of Health as a result of a survey made of Tarut Island. This report, although basically medical, provided statis-

tical information relative to population and number of houses on Tarut. They have also calculated the average number of persons per dwelling unit (5-6 persons). This is the only population count compiled as a result of a door-to-door survey. These figures are not completely accurate because the number of persons living in each dwelling could not be ascertained.

C. ARABIAN AMERICAN OIL COMPANY PUBLICATIONS

ARAMCO Handbook. Prepared by Roy Leblicher, George Rentz, Max Steinecke, and contributions from ARAMCO employees. 1960.

The Arabian American Oil Company has published this large booklet in order that Saudi employees may benefit from the historical, cultural, and environmental aspects of life in their own country. The objective of the handbook is to give general, unsophisticated and basic information regarding the economy (the labor force and the standard of living) in Saudi Arabia.

Agricultural Department. "Why Aramco Needs a Fully Developed Agricultural Assistance Program." Prepared by Dr. Grover F. Brown. 1962.

This report enumerates the reasons ARAMCO needs a fully developed agricultural assistance program. Some of these include: to provide local supplies of fresh fruit and vegetables at lower prices than those of imports; to broaden the local labor base, making more non-oil jobs available; to broaden the financial base so that sound investments of money in local agricultural resources will be made possible and to raise the local living standard by increasing the income from agriculture.

The report discusses each of these reasons in detail.

Arab Development Department. "Increase in Local Pearl Fishing in Damman, Saudi Arabia." September 13, 1956.

A memorandum from Mr. Stauffer to the files.

_____. "A Study of the Most Profitable Uses of the Date Crop of the Eastern Province." Report No. S. 5810.

The conclusions reached by this report may be outlined briefly:

The economic conditions of the date crop, which is by far the most important crop of the Eastern Province, has been deteriorating from year to year. Present prices are very low, yield per tree and per acre is low, and the marketing of a smaller crop is becoming increasingly difficult. Reasons for this are mainly the constant drop in date utilization as animal feed; the drainage problem in the Qatif district; high cost of labor in the province and the increasing scarcity of skilled labor. Also, the lack of any type of organization for marketing or regulations for quality control are partly responsible for the unsatisfactory condition of this highly important crop.

Arab Relations Department. "1958 Survey of Saudi Arab Employees." (Typewritten)

_____. "The Oasis of Al-Hasa." Prepared by F. S. Vidal, 1955.

Arabian Affairs Division. "Report on Home Ownership Program." July 12, 1960.

This report is part of a broader study evaluating the effects on Saudi employees on the program as it affects the Eastern Province. It is an overall evaluation which is essential because a decline in the rate of participating employees is present. The study indicates the necessary changes required to raise the level of participation.

Arabian Affairs Division. "Report on the Home Ownership Program in Rahimah, Saudi Arabia." Prepared by Phoebe A. Marr, January 14, 1961.

This is the same study as the one for Qatif Oasis; however, this attempts to reflect the attitudes of the local women toward the ARAMCO Home Ownership Program. The report is the result of interviews with eighteen women of Rahimah and was made to determine the influence women had and the part they played in the participation or nonparticipation of the Shi'ite employees from Qatif Oasis in the company's housing schemes. Results were sufficiently significant to warrant changes for improvement in this community.

_____. "Report on Home and Family in Qatif Oasis." Prepared by Malcolm Quint. January 25, 1961.

This report covers the results of a survey of homes and families in Qatif Oasis. It shows the response--or lack of it--of the company employees toward the Home Ownership Program.

It indicates the social behavior of the people of Qatif, whose social system is inimical to change in most spheres of life.

Industrial Relations Department. "Survey of Saudi Aran Employees, 1961."

This follows the same format as the 1958 survey. It discusses the marital status of employees, kinship, birthplace, and residence, literacy, and education.

Minor improvements have taken place since 1958, and as a result the 1958 survey is used in most instances to illustrate the role played by the ARAMCO employees in various facets of life. Another reason for using the 1958 survey is that it analyzes Tarut Island on a community level rather than as an island as a whole.

Local Government Relations. Oasis of Al-Hasa. Dhahran: Arabian American Oil Company, 1955.

_____. "Statistics on Qatif Oasis and Tarut Island." Prepared by G. E. Mandis. 1958.

This is a compilation of statistics prepared by ARAMCO on Saudi employees from various parts of the Eastern Province, relating to education, birthplace, religion, and occupation. Important insofar as the progressivists are concerned, the statistics do not necessarily represent Tarut Island.

Tahouk, Abdul Mon 'im S. "Report on Diseases and Insects, Pests of Crops in the Eastern Province of Saudi Arabia." Faculty of the Agricultural Sciences, American University, Beirut, Lebanon, 1961.

This report was prepared by ARAMCO in order to render assistance to the Saudi Arab farmer in knowing the enemies of his crops and modern ways of combatting them as economically as possible.

The report introduces field observations in the three largest oases of Jubail, the Qatif area, and Hofuf for twelve consecutive months. It determined which pests should be studied when the future Quarantine Service is established.

D. MISCELLANEOUS

Albilad (daily newspaper). November 28, 1962, p. 3.

California-Arabian Standard Oil Company of California. "Water Report of the Qatif District." 1942.

This study of the water district of Qatif is rather detailed and diagramatic, concerning the supply of water in this area. There is an abundant supply in the Qatif District from an extensive underground reservoir. The report warns that the storage of water has limitations and that excessive withdrawals will result in serious depletion. The report analyzes the number of wells drilled by contractors in

the Qatif District (including Tarut Island) and the disastrous effect this will have on the water supply --and subsequently on agricultural productivity.

Sadlier, Captain. "Account of a Journey from Katif; His Majesty's 4th Regiment." April 24, 1820.

E. INTERVIEWS

Telephone interview with Abdulla Aquil, Director of Municipal Affairs in the Supreme Planning Council, in Washington, D. C., November 13, 1963.

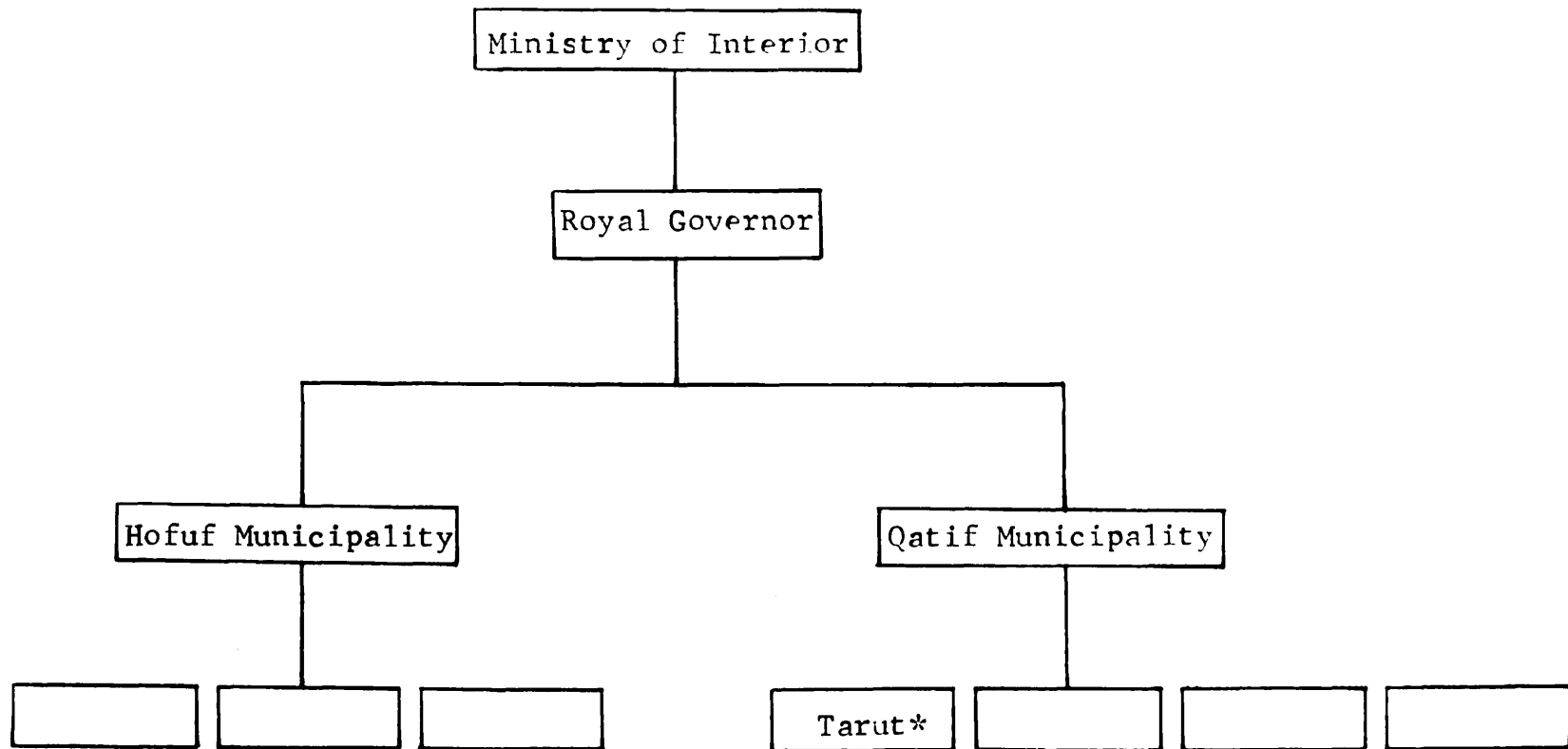
Interview with Dr. Grover Brown, Coordinator of the Agricultural Department, ARAMCO, in Dhahran, Saudi Arabia, July, 1962.

Interview with Dr. Mohammad Dabbanny, Chief Hospital Administrator on Tarut Island, Tarut, July, 1962.

Interview with Maurice Kelley, Head of the Department of Geology, in charge of water resources in the Eastern Province, in Dhahran, Saudi Arabia, July, 1962.

Interview with Abdullah Tefaif, in Tarut Town, Saudi Arabia, July 1962.

A P P E N D I X



*Tarut Island represents the numerous traditional and village types of government at this hierarchical level.

Fig. 4.--Chart of existing provincial government in Eastern Province.

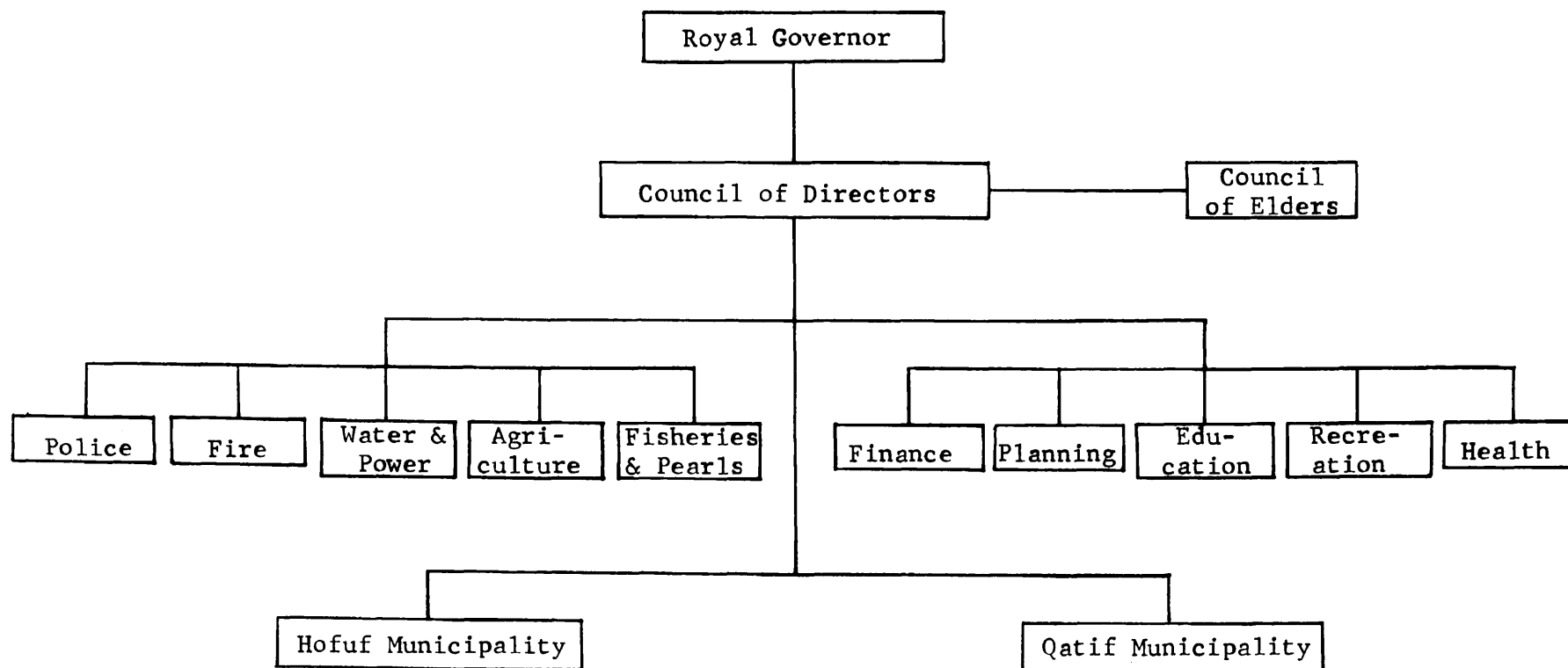


Fig. 5.--Chart of proposed regional government in Eastern Province.